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RURAL DISTRICT COUNCIL.

Annual Report

OF THE

MEDICAL OFFICER of HEALTH

(JOHN F. MACDONALD, M.B., Ch.B., M.D., D.P.H.)

(Barrister-at-Law)

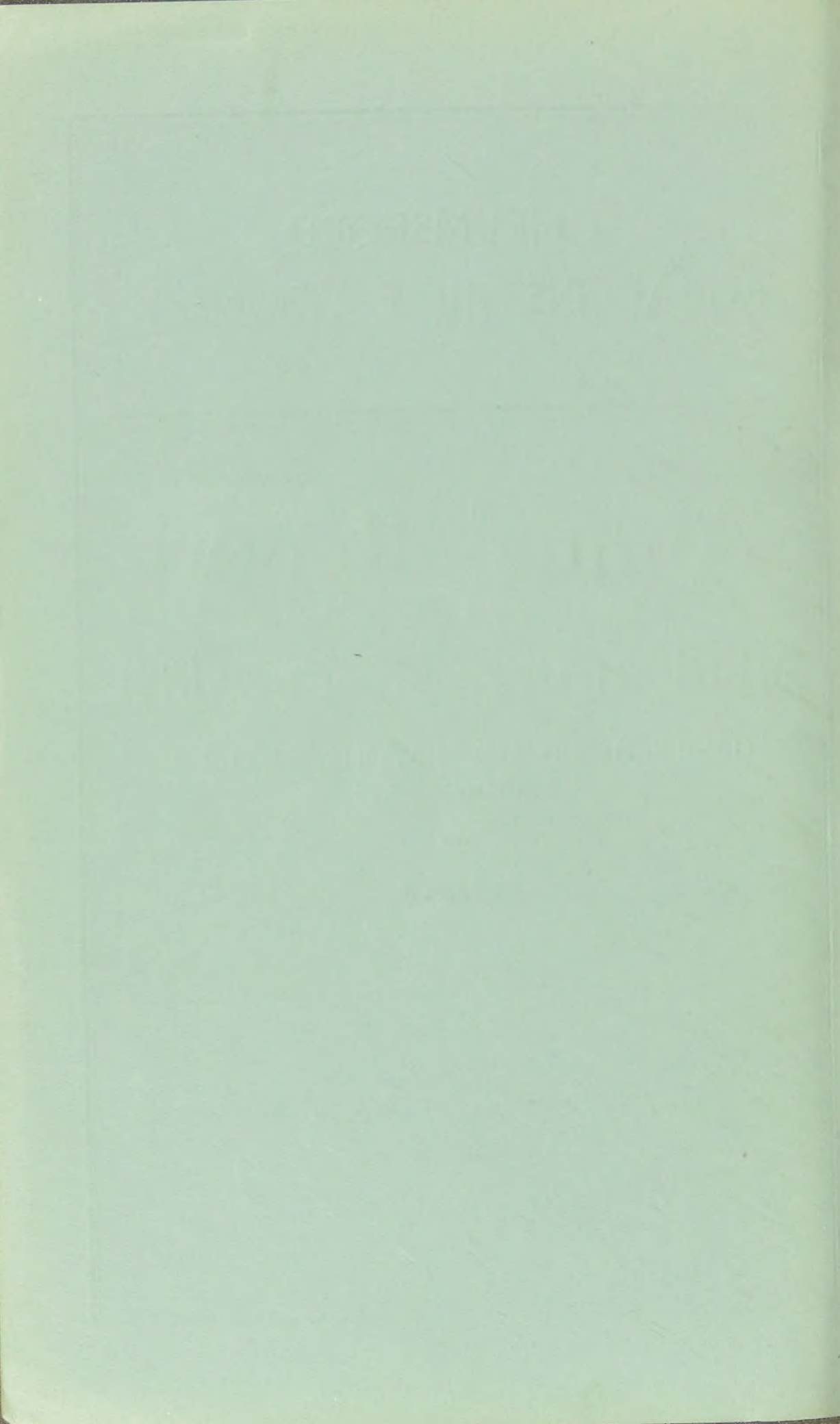
FOR

— 1925. —

CHELMSFORD :

PRINTED BY JOHN DUTTON, 8, TINDAL STREET,
AND 91, HIGH STREET.

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INDEX.

	PAGE.
Natural and Social Conditions	5—10
Occupations	10, 12
Populations of each Parish at each Census since 1801	11
Overcrowding	13
Vital Statistics	13—16
Poor Law Relief	16
Health Services in Area	17—29
List of Committees	17
Hospitals :—	
Tuberculosis	17
Maternity	18
Children's	18
Fever	18—23
Small-pox	24
Poor Law Infirmary	24—26
Ambulance Facilities	27
Clinic Centres	27, 112
Public Health Staff	27—28
Midwives	29
Legislation in Force in Area	29—35
Water Supplies	36—65
Map of Mains in the Area	facing 64
Great Baddow	37—42
Ingatestone	43—47
Danbury and other Parishes	47—53
Writtle	53—57
Broomfield	57—61
Various Supplies	62—65
Rivers and Streams	7—9
Drainage and Sewerage	65—69
Closet Accommodation	69
Scavenging	70—72
Cost of Scavenging	135
Sanitary Inspection of Area	73—75
Knacker's Yard	75

	PAGE.
Inspection of Food	94—101
Dairies and Cowsheds	94—97
Milk Supply... ..	94
Slaughter Houses	76, 77, 99
Meat Inspection	96, 98, 100
Bake Houses	101
Schools	78
Housing	78—92
Town Planning	93
Infectious Diseases	102—110
Table showing Cases admitted to Isolation Hospitals, 1907—1925	facing 110
Maternity and Child Welfare	112—115
Factories, Workshops and Work Places	116
Table showing Birth and Death Rates compared with other Districts	15
Table showing Natural increase in population ...	16
„ Assessable value of Parishes for a series of years	128
„ Produce of 1d. in £ for „ „	129
„ Precepts issued on Overseers for Guardians expenses for series of years	130
„ Precepts issued on Overseers for High- ways and Sanitary expenses for series of years	131
„ Precepts issued on Overseers for special expenses for series of years... ..	132
„ Precepts issued on Overseers for Guardians and Rural District ex- penses for series of years	133
„ Rates levied in each Parish for series of years	134
„ Cost of Scavenging for a series of years	135
„ Number of houses and population in June, 1921 and December, 1925	136
Assets of District Council on 31st March, 1925 ...	137
Report of Petroleum Inspector	117—120
„ Veterinary „	121—127

WATERLOO LANE,

CHELMSFORD,

April, 1926.

**To the Chairman and Members of the Chelmsford
Rural District Council.**

MR. CHAIRMAN AND GENTLEMEN,

I have the honour of presenting for your consideration my Annual Report on the health and sanitary circumstances of your district for the year 1925.

By instructions of the Ministry of Health, the present Report is a Survey Report. Survey Reports are due every five years (the last one was in 1920) and deal comprehensively with the development of the public health services in the district.

In this Report, a short history of Housing, Water Supply, and Sewerage Schemes is given, which I hope members will find useful. For particulars and revision of these I am indebted to Mr. Dewhirst.

To the Clerk's department I am indebted for the information relating to subsidies and loans granted under the Housing Acts, and to the Financial Officer for the tables showing assessable values, rates levied, expenses incurred by the Guardians and Rural District Council in respect to each parish for a series of years.

In the Report I have given the census populations for each parish since 1801, and no doubt the story of the agricultural industry during that period can be read from these figures.

The housing conditions in many of the parishes are far from satisfactory and rents obtainable are so low that private enterprise is not expected to provide the necessary number of houses. Under these circumstances, the District Council has been very active in providing additional housing accommodation. This, no doubt, will result in an increase in the rates, but of all the services rendered to the community by the District Council, none can be more beneficial than the improvement in the housing conditions, and appreciation of such services is shown by the demand for the houses that are being erected by the District Council. In Chelmsford Rural District the type of house needed is one that can be let at a comparatively low rent.

It is hoped the Council will take advantage of the provisions of Section 69 of the Public Health Act, 1925, which enables the Council to assist in the provision of playing fields, and thus encourage the young folk during their spare time to engage in healthy open-air exercise.

For much assistance rendered in the preparation of this Report I am indebted to Mr. Ogden, your Chief Sanitary Inspector.

For the sympathetic consideration and assistance received during the year I beg to thank the Council.

I beg to remain, Gentlemen,

Your obedient servant,

JOHN F. MACDONALD.

CHELMSFORD RURAL DISTRICT.

NATURAL AND SOCIAL CONDITIONS OF THE AREA.

Area (acres)	...	...	82,772 (83,045 land and inland waters).
Population (1925)	...		26,000 (estimated 30th June).
1921 census population	..		24,616 (11,983 males, 12,633 females).
Number of inhabited houses (1921)	...	...	5,803
Number of families or separate occupiers (1921)	...		5,933

The rateable value of the district for the half-year ending—

31st March, 1925, was £165,042 (including lands, £52,776).

30th September, 1925, was £164,154 (including lands, £52,852).

The assessable value of the district for the half-year ending—

31st March, 1925 was £125,460.

30th September, 1925, was £124,575 (a penny rate produces £520).

The outstanding loans on 31st March, 1925, were made up as follows:—

	£	s.	d.
For Hospital	—		
„ Housing (Non-Assisted) ..	2517	17	3
„ Water Supply, Little Baddow ...	609	7	0
„ „ Danbury ...	424	14	2
„ „ E. Hanningfield ...	145	14	2
„ Water Supply, Rettendon ...	957	19	2
„ „ Runwell ...	265	16	10
„ „ Sandon ..	199	16	2
„ „ Woodham Ferris ...	1193	3	9
„ Sewerage and Water Supply, Broomfield ...	4764	10	6
„ „ „ Ingatestone ...	5540	7	6
„ „ „ Gt. Baddow (S.D.D.)	3727	7	1
„ „ „ Writtle (S.D.D.)	5509	18	2
	<hr/> £25926 12 4 <hr/>		

In addition to above outstanding loans, the Council had spent in state-aided Housing Schemes by—

30th September, 1919	...	Nil.
30th „ 1920	...	£18,315 0s. 3d.
31st December, 1920	...	£27,063 19s.
31st March, 1921	...	£44,385 12s. 9d.
31st „ 1922	...	£130,391 13s. 11d.
31st „ 1923	...	£153,330 5s. 4d.
31st „ 1924	...	£156,238 19s. 5d.
31st „ 1925	...	£159,475 4s. 9d.

PHYSICAL FEATURES AND GENERAL CHARACTER OF THE AREA.

The district, which is situated near the middle of the County of Essex, has an irregular oblong form and is 13 to 16 miles north to south and 10 to 13 miles east to west. On the north it is bounded by Dunmow rural district; on the south by

Billericay and Rochford rural districts, being separated from the latter by the River Crouch (except a very small area of Rochford district that lies north of the river); on the east by Braintree and Maldon rural districts; and on the west by Ongar rural district. The Borough of Chelmsford, which is the County Town, is situated in the centre of the district. The whole area is on the London clay. The northern half of the district is slightly undulating, the central area comparatively flat, while the remaining shows undulations with the highest point at Danbury Church O.D. 366 feet. On the east, in the Chelmer Valley, it falls to O.D. 44 feet, and in the south on the bank of the Crouch to O.D. 9 feet.

The northern area is covered with boulder clay varying in thickness from four inches to about 60 feet. Between this boulder clay and the London clay, pockets of sand are scattered at irregular intervals. The Danbury Hill is capped with gravel and acts as gathering ground for water which finds its way into springs which supply a number of parishes in Chelmsford and Maldon rural districts.

There are about 330 acres of common land: Of this there are approximately 157 acres on Danbury Common; approximately 47 acres on Mill Green Common in Ingatestone and Fryerning; approximately 175 acres on Galleywood Common (a small area of this Common is in the Borough of Chelmsford. A portion of Galleywood Common in the Rural District area comprising 113.7 acres is subject to regulations.

The whole area is drained by the River Chelmer and its tributaries. The River Chelmer enters the district (from Dunmow rural district) at the extreme north-west corner of the parish of Great Waltham. From here it flows east and then south through the hamlet of Howe Street (in Great Waltham parish) and the village of Little Waltham. Before reaching the latter it is joined by Walthambury Brook which flows eastwards through the village of Great Waltham. From Little Waltham

village the Chelmer continues towards the Borough of Chelmsford touching the parishes of Little Waltham, Broomfield and Springfield. In the Borough it is joined by the River Can.

The River Can enters the district (from Dunmow rural district) at the north-west corner of the parish of Good Easter flowing south and then south-east through the parish of Good Easter and touching the parishes of Roxwell, Mashbury and Chignal, flowing towards Two Bridge in Writtle parish near where it is joined by Roxwell Brook which flows eastwards from Ongar rural district to Coley Bridge in the south-west corner of Roxwell parish where it is joined by Ewson's Brook after the latter has flowed northwards through Highwood. From Coley Bridge Roxwell Brook flows north-east towards and through the village of Roxwell (east of which it is joined by Newlands Brook) and then south-east through the parish of Writtle towards Two Bridge in that parish near where it joins as above stated the River Can. From this point the River Can flows south-east towards north end of Lawford Lane near where it is joined by the River Wid.

The River Wid touches (from Billericay rural district) the district on the west border of Buttsbury parish near Buckwins Farm (north of this point it is joined by a small stream flowing west from south of Stock village) from which point it flows in a northerly direction touching the parishes of Buttsbury, Ingatestone & Fryerning, and Margaretting, to the south west boundary of the Borough of Chelmsford. From here it flows north crossing the London Road at Widford Bridge, and east of the village of Writtle crossing the Writtle Road, and joining the River Can as stated above near the north end of Lawford Lane. From this point the River Can flows towards and through the Borough of Chelmsford where it joins the River Chelmer as above stated.

The River Chelmer, after leaving the Borough of Chelmsford, again enters the rural district flowing almost eastwards and touching the parishes of Springfield, Great Baddow, Sandon, Boreham and Little Baddow towards the tidal River Blackwater

in the Maldon rural district which it joins. This portion of the Chelmer is canalised.

At Mill House, Little Baddow, the River Chelmer is joined by a stream formed by the junction of two brooks—one flowing north from Billericay rural district through South Hanningfield, eastern section of West Hanningfield, along the western boundary of Sandon parish to east of the Grove, Great Baddow, where it is joined by a small brook flowing from Brook Farm, Great Baddow, from near the Grove, it flows north-east to Sandon Lodge, where it is joined by a brook flowing west from Purleigh parish in Maldon rural district through the parishes of Danbury (south of the common) and Sandon, joining the above mentioned brook at Sandon Lodge. From this point the stream so formed flows northwards crossing the Chelmsford-Danbury main road at Sandon Bridge, near Potash and continuing northwards through the north-west section of Danbury parish and Little Baddow parish where it joins the River Chelmer at Mill House as above mentioned.

By the Chelmsford Corporation Water Act of 1923, the Corporation of Chelmsford has obtained parliamentary sanction to extract water on certain conditions, not exceeding 1,000,000 gallons per day from the Chelmer river near Sandford Mill, and the Southend Waterworks Company, by the Southend Waterworks Act, 1924, sanction was given them to extract water near Rushes Lock, Woodham Walter parish in Maldon rural district, on certain conditions as to quantity available for navigation, etc.

SOCIAL CONDITIONS.

At the 1921 census 45 per cent. of the occupied adult male population was engaged in the agricultural industry, but in 1871 there were over a thousand more engaged in the same industry.

I have ascertained the census figures from 1801, the year the first census was taken in this country, and this is set out for each parish in the table on page 11.

From 1801 to 1901 the district depended mainly upon the agricultural industry and it is noticed that from 1801 there is a gradual increase with a crest of highest population in the period 1841 to 1871 varying slightly according to parish, some showing the highest figure sooner than others. From 1901 onwards other occupations have influenced the prosperity of the district and now many workmen employed in works in the Borough of Chelmsford reside in the rural district, while a considerable number of persons employed in London live in the district, the railway facilities being on the whole satisfactory.

Local conditions sometimes upset the curve of rise or fall throughout the period 1801 onwards; for instance the increased number of persons in Springfield at the 1831 census compared with 1821 was due to the large number employed in the erection of the County Gaol, and in 1851 there were 298 persons in residence in the same institution. Moreover a portion of this parish with a population of 3,075 (in 1901) was transferred to the Borough of Chelmsford in 1907.

At the 1841 census the large increase in the parish of Widford and, to a less extent noticed in other parishes, is due to the number of persons working at the construction of the railway.

At the 1851 census there were 444 more persons employed in the agricultural industry than at the 1921 census—70 years later, and if the table on page 11 is referred to, it is seen that a number of the agricultural parishes had a larger population at the 1871 census than 50 years later, namely, at the 1921 census. In 1871 agriculture was fairly prosperous.

The table on page 12 gives a detailed analysis relating to occupation as enumerated at the 1921 census. No occupation carried on in the district can be said to be detrimental to those engaged therein.

	Acres.	1801	1811	1821	1831	1841	1851	1861	1871	1881	1891	1901	1911	1921
Boreham	3,801	813	889	918	991	1050	1040	989	951	992	944	820	881	1023
Broomfield	2,332	467	543	624	747	820	851	849	790	855	898	911	1209	1396
Butsbury	2,113	385	474	522	515	521	506	531	487	452	507	532	697	863
Chignall	2,027	229	235	291	297	346	305	328	423	358	426	367	370	367
Danbury	3,495	768	939	1005	1060	1189	1221	1113	1047	978	839	849	1008	1181
East Hanningfield	2,682	336	378	398	447	449	452	453	490	404	396	418	453	474
Good Easter	1,985	429	429	478	487	504	500	539	581	520	508	488	451	417
Great Paddow	3,911	1445	1461	1603	1719	2022	2122	2061	2057	2055	2019	2308	2582	2879
Great Leighs	3,146	524	540	607	756	765	874	909	863	755	720	614	643	676
Great Waltham	7,451	1475	1615	1883	2013	2154	2335	2380	2462	2349	2222	2021	2063	2029
Ingatstone and Fryerning	4,133	1291	1293	1359	1459	1663	1603	1589	1616	1630	1688	1748	1915	2012
Little Paddow	2,756	456	548	583	548	592	622	605	602	541	543	510	545	671
Little Leighs	1,079	125	135	160	189	182	164	171	149	125	115	143	116	130
Little Waltham	2,310	532	533	620	674	690	651	684	697	580	661	646	640	668
Margaretting	2,284	395	399	479	545	570	517	483	530	526	511	551	677	590
Mashbury	898	98	88	85	96	85	91	120	138	142	154	174	159	128
Pleshey	732	246	221	289	320	337	351	342	373	302	317	231	262	278
Retten-on	3,708	419	501	580	671	807	817	785	808	720	758	692	835	851
Roxwell	4,782	669	751	817	847	827	915	936	959	814	766	696	714	749
Runwell	2,070	243	251	307	341	324	334	366	313	333	275	239	316	382
Sandon	2,408	342	348	488	525	531	536	512	504	466	476	398	524	635
Sth. Hanningfield	1,488	180	159	176	214	226	215	235	247	234	204	174	230	238
Springfield	2,268	889	1201	1450	1851	2256	2582	2566	2647	2528	2636	405	482	445
Stock	2,724	503	532	610	619	605	702	657	632	565	603	585	587	669
West Hanningfield	2,839	353	307	468	480	521	555	527	533	430	464	409	411	526
Widford	680	113	103	118	157	362	184	257	330	300	293	323	355	370
Woodham Ferris	4,482	667	747	865	826	895	891	947	837	673	769	878	984	1168
Writtle	8,458	1599	1830	2100	2348	2521	2423	2374	2425	2412	2462	2649	2649	2792
	83,045	14990	17510	19943	21742	23814	23449	23458	24554	23037	23174	20779	22791	24616

TABLE SHOWING COMPARISON OF OCCUPATIONS IN THE
DISTRICT AT THE 1921 CENSUS.

Occupation.	Males.	Females.
Total Population	11,983	12,633
Aged 0- 11	2,731	2,682
Aged 12 and upwards	9,252	9,951
Fishermen ... ..	...	...
Agricultural Occupations	3,606	141
Mining and Quarrying Occupations...	16	...
Makers of Coke, Lime, Cement, etc.	1	...
Makers of Bricks, Pottery, Glass	47	1
Workers in Chemicals, Paints, etc.	3	3
Metal Workers	777	89
Workers in Precious Metals	3	...
Electrical Apparatus Makers, Fitters, etc.	139	26
Makers of Watches, etc.	6	...
Workers in Skins, Leather Goods Makers	30	1
Textile Workers	5	2
Makers of Textile Goods and Articles of Dress	54	84
Makers of Foods, Drinks and Tobacco	145	16
Workers in Wood, etc.	257	2
Paper Workers, Printers, etc.	24	2
Builders, Bricklayers, etc.	496	1
Painters and Decorators	112	1
Workers in other Materials	4	3
Workers in Mixed and Undefined Materials	10	1
Persons in Gas, Water, Electricity Supply	12	...
Transport Workers	496	13
Commercial and Financial Occupations	456	155
Public Administration and Defence... ..	143	58
Professional Occupations	177	236
Persons Employed in Entertainments, etc.	14	5
Persons Employed in Personal Service	219	1,290
Clerks, Draughtsmen, Typists, etc.	219	175
Warehousemen, etc.	71	4
Stationary Engine Drivers, etc.	33	...
All other Occupations	426	28
Total occupied... ..	8,001	2,337
Unoccupied and Retired	1,251	7,614
Total Occupied and Unoccupied	9,252	9,951

OVERCROWDING.

At the 1921 census there were 94 houses overcrowded, namely, with more than two persons per room. These were distributed as follows:—Boreham 2, Broomfield 6, Buttsbury 3, Chignall 1, Danbury 3, East Hanningfield, 2, Good Easter, 3, Great Baddow 8, Great Leighs 4, Great Waltham 8, Ingatestone and Fryerning 6, Little Baddow 1, Little Leighs 2, Little Waltham 1, Margaretting 1, Mashbury 0, Pleshey 1, Rettendon 6, Roxwell 4, Runwell 1, Sandon 0, South Hanningfield 0, Springfield 0, Stock 4, West Hanningfield 3, Widford 2, Woodham Ferris, 6, Writtle 16. Total, 94.

VITAL STATISTICS OF THE DISTRICT.

BIRTH RATE. During the year there were 452 births equivalent to an annual birth rate of 17.3 per 1,000 of the estimated population. This is the fourth lowest on record for the district.

INFANT MORTALITY. Only 17 (1 illegitimate) deaths occurred among children under one year of age, which is equivalent to 40 per 1,000 births, as against 75 for the whole country.

DEATH RATE. The general death rate per 1,000 of the estimated population is 10.7, which can be considered very satisfactory. As the death rate is influenced by the age and sex incidence of the population, the Registrar-General furnishes a standardizing factor (.780 for Chelmsford R.D.) which multiplied by the death rate (crude) of the district, gives the standardized death rate, namely, which would have occurred in the district had the population been the same as regards sex and age as that of England and Wales at the census of 1921. By this means we are able to compare the Death Rate of the district with that of the country as a whole.

The corrected death rate for the district for the year was 8.4 per 1,000 of population, compared with 12.2 for the whole country. A very satisfactory comparison.

The deaths classified according to age were as follows:—

Age.		No. of deaths.	
Under 1 year	...	...	17
1 and under 2	...	...	5
2	5	...	5
5	15	...	6
15	25	...	16
25	45	...	20
45	65	...	47
65 and over	...	...	164
			280

The following table classifies the deaths according to cause and sex:—

Cause of Death.	Males.	Females.	Total.
Enteric Fever ...	...	...	...
Small-pox ...	...	...	...
Measles ...	...	...	...
Scarlet Fever ...	...	...	...
Whooping Cough ...	...	...	...
Diphtheria ...	1	...	1
Influenza ...	9	6	15
Encephalitis Lethargica ...	...	...	...
Meningococcal Meningitis ...	1	...	1
Tuberculosis of Respiratory System ...	12	7	19
Other Tuberculous Diseases ...	1	2	3
Cancer, Malignant Disease ...	22	13	35
Rheumatic Fever ...	...	...	...
Diabetes ...	2	1	3
Cerebral Hæmorrhage, &c. ...	5	14	19
Heart Disease ...	12	25	37
Arterio-sclerosis ...	3	...	3
Bronchitis ...	12	12	24
Pneumonia (all forms) ...	2	5	7
Other Respiratory Diseases... ..	2	2	4
Ulcer of Stomach or Duodenum ...	2	...	2
Diarrhœa, &c. (under 2 years) ...	...	...	...
Appendicitis and Typhilitis ...	...	...	...
Cirrhosis of Liver ...	...	1	1
Acute and Chronic Nephritis ...	3	3	6
Puerperal Sepsis ...	...	...	...
Other Accidents and Diseases of Pregnancy and Parturition ...	...	2	2
Congenital Debility and Malformation, premature Birth ...	3	9	12
Suicide ...	2	1	3
Other deaths from Violence ...	4	2	6
Other defined Diseases ...	33	43	76
Causes ill-defined or unknown ...	...	...	1
	131	149	280
Special causes (included above) Leprosy ...	1	...	1

BIRTH-RATE, DEATH-RATE, AND ANALYSIS OF MORTALITY DURING THE YEAR 1925.

	BIRTH-RATE PER 1,000 TOTAL POPULA- TION.	ANNUAL DEATH-RATE PER 1,000 POPULATION.										RATE PER 1,000 BIRTHS.		PERCENTAGE OF TOTAL DEATHS.		
		All Causes.	Enteric Fever.	Small-pox.	Measles.	Scarlet Fever.	Whooping Cough	Diphtheria.	Influenza.	Violence.	Diarrhoea and Enteritis (under Two years).	Total Deaths under One Year.	Causes of Death certi- fied by Medical Practitioners.	Inquest Cases.	Uncertified Causes of Death.	
England and Wales	18.3	12.2	0.01	0.00	0.13	0.03	0.15	0.07	0.32	0.47	8.4	75	92.1	6.9	1.0	
105 County Boroughs and Great Towns, including London.	18.6	12.2	0.01	0.00	0.17	0.03	0.18	0.09	0.30	0.43	10.8	79	92.1	7.3	0.6	
157 Smaller Towns (1921 Adjusted Populations 20,000-50,000).	18.3	11.2	0.01	0.00	0.15	0.02	0.14	0.06	0.31	0.38	7.6	74	93.0	5.9	1.1	
London	18.0	11.7	0.01	0.00	0.08	0.02	0.19	0.11	0.23	0.46	10.6	67	91.1	8.9	0.0	
Chelmsford R.D.	17.3	10.7	0.00	0.00	0.00	0.00	0.00	0.04	0.57	0.31	0.0	40	93.9	1.4	1.7	

The natural increase in the population, namely, the excess in the number of births over the number of deaths, is shown in the following tabular statement for each year since 1910 : -

During 1910 there were 438 births and 277 deaths, giving a natural increase of 161.

"	1911	"	486	"	275	"	"	"	211.
"	1912	"	517	"	273	"	"	"	244.
"	1913	"	525	"	261	"	"	"	264.
"	1914	"	441	"	281	"	"	"	160.
"	1915	"	460	"	349	"	"	"	111.
"	1916	"	457	"	318	"	"	"	137.
"	1917	"	383	"	298	"	"	"	85.
"	1918	"	383	"	293	"	"	"	90.
"	1919	"	396	"	286	"	"	"	110.
"	1920	"	607	"	289	"	"	"	318.
"	1921	"	461	"	242	"	"	"	219.
"	1922	"	452	"	266	"	"	"	186.
"	1923	"	466	"	307	"	"	"	159.
"	1924	"	457	"	302	"	"	"	155.
"	1925	"	452	"	280	"	"	"	721.

POOR LAW RELIEF. The number of persons in receipt of outdoor relief varied very little during the year, and the number receiving outdoor relief on 31st December, 1925, was as follows:—

		Rural District Area.		Borough Area.
Men	...	40	...	35
Women	...	117	...	120
Children	...	120	...	171
		<hr/> 277		<hr/> 326

Receiving Medical Relief only ... 16

During the year ending 30th September, 1925, the number of cases in the Workhouse and Infirmary were:—

		Rural District Area.		Borough Area.		Total.
Men	...	90	...	81	...	171
Women	...	101	...	61	...	162
Children	...	24	...	8	...	32
		<hr/> 215		<hr/> 150		<hr/> 365

GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

The Rural District Council consists of 33 elected members. The Council meets monthly after the sitting of the Board of Guardians. There are several Committees dealing with Public Health matters, each of which meets once a month, on the Tuesday preceding a Council Meeting. The Committees' reports are presented at the following Council Meeting. The Minutes of the Council are printed and distributed.

LIST OF COMMITTEES.

Finance Committee.

Buildings and Works and Town Planning Committee.

Sanitary Committee.

Drainage and Water Supply Committee.

Housing Committee.

Sanitary Services Committee (at present responsible for the scavenging services).

Maternity and Child Welfare Committee (including three lady members).

The Council is represented on the :—

Chelmsford Joint Sewerage Committee.

Chelmsford Joint Hospital Board.

South-East Essex United Districts (Medical Officer of Health) Committee.

Hospitals provided or subsidised by the Local Authority or by the County Council :—

1. TUBERCULOSIS HOSPITAL. These are provided by the County Council. None of the institutions so provided are in the Chelmsford Rural District.

2. **MATERNITY HOSPITAL.** Arrangements are made with the Chelmsford General Hospital to admit mothers suffering from complications occurring after parturition and expectant mothers requiring special surgical operations such as cæsarean section.
3. **CHILDREN'S HOSPITAL.** Arrangements are made with Chelmsford General Hospital to admit children under 5 years of age requiring in-patient treatment.

FEVER HOSPITAL. In December, 1891, the then Sanitary Authority passed the following resolution :—"That the Authority take immediate steps to provide a permanent hospital for infectious cases arising in the district."

In April, 1893, the Local Government Board held an enquiry and subsequently sanctioned a loan for the purchase of land and erection of an Isolation Hospital to serve the rural area (the Borough of Chelmsford was not a party to the proposals).

The selected site on the south side of Baddow Road consisted of three acres of land, but at this time only a little more than an acre was fenced in with corrugated iron—the remainder was being worked as a gravel pit. The hospital at first erected and completed during 1893 consisted of a single block with two wards for three and two beds respectively, and a kitchen or nurses' room. A cottage (in which resided the caretaker and his wife, who acted as nurse) with following accommodation on the ground floor living room, kitchen and scullery, and a room for the medical officer, and on the first floor four bedrooms and a box room.

The first patient was received into the hospital on 1st January, 1894. When the hospital was insufficient, it was the practice to accommodate the patients in tents erected in the hospital grounds.

During 1895 a disinfecting apparatus was installed and an ambulance shed erected.

Eight years after Chelmsford Rural District Council, had erected the first Isolation Hospital, an enquiry was held by the Local Government Board (11th February, 1902) with a view to the formation (with the consent of both Authorities) of a Joint Hospital Board to serve the Rural District and Borough of Chelmsford. The Joint Hospital Board was to take over the then existing hospital, the property of the Rural District Council. The proposals were approved of, and the Order made by the Local Government Board, which came into operation on 22nd July, 1902, includes among others the following conditions :—

1. The District is called "Chelmsford Joint Hospital District," comprising the Borough of Chelmsford and the Rural District of Chelmsford.
2. The Governing Body being "Chelmsford Joint Hospital Board," consisting of two *ex-officio* members (one representing each constituent Authority and three elected members representing the Borough of Chelmsford, and five representing the Rural District Council. (The number of elected representatives has been altered by Order made 15th February, 1909, by the Local Government Board in consequence of the inclusion of an area of the Rural District within the Borough, the elected representatives now being four for each constituent Authority).
3. The purposes for which the United District is formed are the provision, maintenance and management of a hospital provided for the reception of cases of infectious diseases which may be required for the use of the inhabitants of the constituent districts.
4. Persons shall be admitted into a hospital provided by the Joint Board in any of the following modes and not otherwise, except with the consent of the constituent authorities :—

- (a) By an Order of the Joint Hospital Board or of either of the constituent authorities.
- (b) By an Order of a Medical Officer of Health of either of the constituent authorities.
- (c) By an Order of a Medical Officer appointed by the Joint Board.
- (d) By an Order of a Justice made under the provisions of Section 124 of the Act, with the consent required by that Section.

Agreement can be made with the Board of Guardians to admit persons in receipt of Poor Law relief on terms.

5. All expenses of the Board to be defrayed out of a common fund to which shall be paid sums received from the constituent authorities in respect of the cost of maintenance of patients as hereinafter provided and the sums recovered for patients. The common fund, so far as not provided by such payments, shall be contributed by the Borough of Chelmsford, two-fifths; the Rural District of Chelmsford, three-fifths. (By the amending Order of 1905 these have been altered. The Borough and Rural District contributions are now in equal proportions).

The cost of maintenance of patients shall include all the expenses incurred, except the salaries of the Medical Officer and permanent nurses, and repairs to hospital to fittings and furniture.

During 1905 the hospital was enlarged by the provision of a second ward block, and additional accommodation for the staff.

During 1915 the military authorities erected an asbestos pavilion to accommodate 18 patients, which was subsequently purchased by the Joint Hospital Board. The present accommodation at the Fever Hospital, Baddow Road, is as follows :—

Administrative Block. Ground floor. Matron's room, office, kitchen, scullery and pantry, cloakroom, dining room, 1 w.c. 1st floor. 10 bedrooms, bathroom, 1 w.c.

1 Coal Shed.

Disinfecting House. Fitted with Manlove & Elliott disinfecter. Brick building divided for infected and non-infected bedding and clothing.

Laundry. Contains wash-house and drying room.

Garage. Housing:—1 motor ambulance, 1 horse ambulance. (in reserve).

Scarlet Fever Block. Ground floor with accommodation in two main wards for 10 beds (6 in one ward and 4 in the other) 2 side wards leading from main wards for 1 bed in each, 1 w.c., kitchen and sluice room. 1st floor with accommodation for 2 beds in two wards (1 in each), 1 w.c.

Pavilion Ward with accommodation for 16 beds in two main wards and 2 in side wards (1 in each), 2 bathrooms, 2 w.c.s for patients, 1 for staff, 1 sluice room, 1 kitchen.

1 wooden shelter in grounds for 1 patient. 1 bed.

Diphtheria Block. Accommodation for 7 beds (4 in one and 3 in the other) in 2 wards, 1 kitchen, 1 bathroom, 2 w.c.s on verandah.

Accommodation for Patients is given in the following tabular form:—

Ward Blocks.

Ward.	Measurements.	Area. sq. ft.	Air space cub. ft.	Number of beds on	
				Ministry standard.	Pro- vided.
Diphtheria Block.					
1 Ward ..	36ft. by 18ft. by 13ft.	... 648	... 8,424	... 4	8 (6 beds 2 cots).
1 „ ...	24ft. by 18ft. by 13ft.	.. 432	... 5,616	... 3	4 (3 beds 1 cot).

Ward.	Measurements.	Area. sq. ft.	Air space cub. ft.	Number of beds on	
				Ministry standard.	Pro- vided.
Scarlet Fever Block.					
1 ,, ...	36ft. by 26ft. by 13ft.	.. 936	... 12,168	... 6	9 (6 beds 3 cots).
1 ,, ...	26ft. by 24ft. by 13ft.	... 924	... 1,112	... 4	4
1 (Obs.) Ward	13ft. by 12ft. by 12ft.	... 156	... 1,872	... 1	1
1 Ward	... ,, ,, ,,	... ,,	... ,,	... 1	1
1 (Convl.)					
Ward	12ft. 6in. (recess 6ft. by 11 ft. 6in.) by 16ft. by 12ft....	269	... 3,228	... 1	2
1 (Convl.)					} Thesetwo wards are on first floor.
Ward	14ft. 6in. by 18ft. 6in. (in bay 11ft. 6in.) by 12ft....	236	... 2,832	... 1		2
Military Pavilion.					
1 Ward	59ft. by 24ft., 9ft. to eaves	...1,426	... 15,576	... 8	12
1 ,, ...	59ft. by 24ft., 13ft. to ridge	... ,,	... ,,	... 8	12
1 (Obs.) Ward	13ft. by 12ft. by 10ft.	... 156	... 1,560	... 1	1
1 ,, ,, ,, ,, ,,	... ,, ,, ,, ,, ,,	... ,,	... ,,	... 1	1
12 Wards.				Beds 39	57

Mortuary. Brick-built structure with tiled internal walls and floor. This adjoins store and disinfecting house.

Caretaker's Lodge with sitting room, 2 bedrooms, scullery and kitchen.

Prior to 1922 the Hospital was lighted by gas but in that year electric light was laid on at a cost of £243. The heating of the wards is by open fires and hot water pipes except the large pavilion erected by the Military which is heated by coke stoves. The provision of hot water pipes for this pavilion has been recently decided upon.

A sketch (block) plan of the hospital is shown on page 21. I am indebted to Dr. Vercoe, Medical Officer to the Joint Hospital Board, for the use of the plate.

SMALL-POX HOSPITAL. Accommodation for small-pox cases is provided by a four-bed hospital (wood and iron) situated at Baker Lane; Galleywood.

OTHER HOSPITALS. There is no General Hospital actually situated in the district, but cases requiring in-patient treatment at a General Hospital are sent to one of the London Hospitals or to Chelmsford General Hospital, which serves the whole of the Rural District.

During the year 254 patients were treated in Chelmsford Hospital from Chelmsford Rural District.

POOR LAW INFIRMARY. At the end of the year a new Infirmary and Nurses' Home, erected by the Chelmsford Board of Guardians, was nearing completion. To the Architects (Messrs. Tooley and Foster) I am indebted for the following description of the buildings:—

The Infirmary provides accommodation for 120 beds arranged as follows:—

- 4 Main wards of 24 beds each.
- 2 Three bed wards.
- 2 Two bed wards.
- 4 Single bed wards.
- 2 Children's wards of four beds each.
- 1 Two bed maternity ward.

Each main ward is 75ft. by 24ft. and has attached a large sun room facing south with beautiful prospects over the golf links, an open verandah or balcony, its own bathroom, lavatories, sink room and linen store, with fire escape exits at the ends of the wards. Over the main wards the roofs are flat covered with asphalt and can be used for any form of open-air treatment.

In addition to the above-mentioned accommodation there is on the ground floor a large room for the Medical Officer and Dispensary with a specially designed cupboard fitment and a duty room with the necessary stores and larder.

Two other duty rooms are placed on the first and second floors.

The maternity ward is placed on the second floor and attached to it is the labour room and separate room for sinks, &c.

The main staircase is in oak in order to be fire resisting and a patients' lift is fitted serving all floors.

In the basemert are located boilers and fuel stores.

The building is of brick, faced with red bricks made in Chelmsford, the floors throughout are of fireproof hollow blocks and the roof of the central portion is covered with sand faced tiles.

The wards have floors of linoleum and painted plaster walls, the dispensary, duty rooms and corridors have terrazzo floors and dadoes.

The whole of the internal joinery is of Oregon pine, stained and varnished.

The sanitary fittings have been specially designed to avoid unnecessary cleaning. Wherever possible in lavatory basins the taps are located at the side operated by enamelled levers and where not possible the fittings are bronzed to obviate cleaning.

All door furniture likewise is of bronze to obviate cleaning.

The windows of children's wards, sun rooms and upper portion of ward windows on the south are fitted with "Vita" glass that admits the health giving ultra-violet rays of the sun.

The building is heated throughout by hot water radiators with fireplaces in some of the smaller wards. The building is lighted by electricity throughout.

The main ward furniture has been specially designed by the Architects.

The nurses' home is a separate building and has been deliberately designed in a more domestic architectural style with windows of iron casements and leaded lights. The accommodation is for 20 nurses and consists on the ground floor of dining room and sitting room for nurses, designed to be thrown together for recreational purposes, a charge nurse's sitting room, superintendent nurse's sitting room, kitchen, stores and lavatory accommodation.

Twenty bedrooms are arranged on the first and second floors with five bathrooms and with the necessary linen rooms and lavatory accommodation and ample storage is provided in the roof for boxes, &c.

Each bedroom is fitted with a good hanging cupboard and drawer.

A balcony on the first floor, facing south, has a beautiful prospect across the golf links.

The general contractor has been Mr. T. J. Bailey, of Chelmsford, and the Clerk of Works, Mr. A. E. Wright.

The sub-contractors have been as follows :—Sanitary fittings, The Leeds Fireclay Co. ; Lift, Messrs. Waygood Otis & Co. ; Asphalte flats, Messrs. Engert & Rolfe ; Fireproof floors, The Kleine Patent Fire-resisting Flooring Syndicate, Ltd. ; Terrazzo floors and dadoes, Messrs. Diespeker & Co. ; the joinery and special furniture, Messrs. J. Sadd & Sons, of Maldon ; Electric lighting, Messrs. Christy Bros., of Chelmsford.

The Architects of the scheme have been Messrs. Tooley and Foster, F.R.I.B.A., of Buckhurst Hill, Essex.

INSTITUTIONAL PROVISION FOR UNMARRIED MOTHERS, ILLEGITIMATE INFANTS AND HOMELESS CHILDREN IN THE AREA. The only accommodation is that provided by the Board of Guardians.

AMBULANCE FACILITIES. (a) For infectious diseases there is a motor ambulance which is housed at the Isolation Hospital in Baddow Road.

(b) For non-infectious and accident cases there is a motor ambulance available provided by the Red Cross.

CLINIC AND TREATMENT CENTRES. There are eight Child Welfare Centres provided or subsidised by the District Council. These are given in detail under Maternity and Child Welfare on page 112.

There are no Day Nurseries in the district. School Clinics, Tuberculosis Dispensaries and Treatment Centres for Venereal Diseases are provided by the County Council.

PUBLIC HEALTH STAFF.

The Staff consists of—

John F. Macdonald, M.D., D.P.H., Medical Officer of Health, who is also Medical Officer of Health for the Maldon and Rochford Rural Districts.

Miss Olive H. Gowers, Cert. R. San. I., Clerk to the Medical Officer of Health.

Miss Nellie S. Bass, Health Visitor, who is a Certified Midwife and Health Visitor.

Miss R. W. Pascoe, Part-time Assistant Health Visitor, Fully Trained Nurse and Certified Midwife.

A. Denton Ogden, M.R.S.I., M.S.I.A. (Qualified Inspector of Meat and other Foods, Royal Sanitary Institute), Senior Sanitary Inspector and late Investigator to the Industrial Fatigue Research Board (Medical Research Council).

J. H. Lewis. Cert. R. San. I., M.S.I.A., Second Sanitary Inspector.

The duties assigned to the Second Inspector are as follows :

Disinfection of premises, inspection of schools, bakehouses, dwelling-houses (under the Housing (Inspection of District) Regulations, 1910).

Inspecting and reporting whether notices served by the Council have been complied with.

Investigating and reporting on the water supply to new houses.

Investigation of complaints when directed by Medical Officer of Health.

Sanitary inspection of specific areas when directed by the Council, Committee, or Medical Officer of Health.

Carry out duties of Senior Sanitary Inspector when he is absent on leave or occupied with other duties.

William Edser, Consulting Sanitary Inspector.

James Dewhirst, A.M.I. Mech. E. M.Inst. M. & Cy. E. Engineer, Surveyor and Housing Architect.

T. T. Thomas, Assistant Surveyor.

N. Dewhirst, ,, ,,

Miss Beatrice Butler, Clerk to ,,

Mr. P. J. Bowling, Town Planning Surveyor (Part-time).

PROFESSIONAL NURSING IN THE HOME. (a) *General*. No arrangements have been made by the District Council, but for General Nursing there are a number of local Nursing Associations throughout the district who employ nurse-midwives. These are under the supervision of the County Nursing Association, and the District Council has no control, either direct or indirect, over these Associations. (b) *Infectious Diseases*. No arrangement has been made by the District Council.

MIDWIVES. None is subsidized by the District Council. There were 19 midwives practising in the district at the end of 1925.

CHEMICAL WORK. Water analysis is undertaken by the District Council. This is mainly undertaken in connection with new houses and public supplies. During the year there were 38 samples analysed in addition to those of public supplies.

LEGISLATION IN FORCE.

The following are the special local Orders, Regulations and General Adoptive Acts in force in the district.

URBAN POWERS.—The Council has the following Urban Powers:—

Conferred by the L.G.B., April 29th, 1876.

Public Health Act, 1875.

Section.	Subject.	Parishes to which powers apply.
277	.. Constitution of Great Baddow s.d.d.	Great Baddow.

Conferred by the L.G.B., April 8th, 1880.

(came into operation 26th April, 1880).

20	... Plans of Sewers (Special Expenses)	Great Baddow, Ingatestone and Fryerning, Springfield.
26 ¹	... Building over Sewers	
44	... "Cleaving" Bye-laws	The whole district.
45	... Receptacles for rubbish	Writtle.
47 ² ³	... Nuisance on premises	Ingatestone & Fryerning and Springfield.
157 ² ³ ⁴	... Building Bye-laws	... The whole district.
158	.. Building Bye-laws contravention of	... " "

169 ² 170...	Slaughterhouses, regulation of	Great Baddow, Boreham, Broomfield, Buttsbury, Danbury, Good Easter, West Hanningfield, Ingatestone and Fryerning, Great Leighs, Pleshey, Roxwell, Stock, Great and Little Waltham, Widford, Woodham Ferris, Writtle and Springfield.
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The above powers (Slaughterhouses) and Sections 29, 30, 31 of the Public Health Acts (Amendment) Act, 1890, came into operation for the whole district 5th June, 1922. (This was the first time these sections were made applicable to any parish in the district).

*Conferred by order of L.G.B., 20th July, 1887
(came into operation 15th August, 1887).*

Section.	Subject.	Parishes. to which powers apply.
42	... Removal of House refuse, &c.	Great Baddow s.d.d., Ingatestone & Fryerning, Springfield.

*Conferred by order of L.G.B., June 3rd 1892
(came into operation 4th July, 1892).*

157 ¹	... Bye-laws relating to width of streets	The whole district.
161 ¹	... Lighting streets	... Great Baddow s.d.d., Ingatestone & Fryerning, Writtle (and Widford 1909).

Conferred by L.G.B., January 19th, 1894

(came into operation 19th February, 1894.)

112, 113, 114,	Offensive trades, regula-	Great Baddow s.d.d.,
115	tion of	Broomfield, Ingate-
	(special expenses)	stone & Fryerning,
		Great and Little
		Waltham, Writtle
		and Springfield.

Conferred February 28th, 1895

(came into operation 1st April, 1895).

197	... Provision of offices	... The whole district.
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Conferred March 20th, 1896

(came into operation 20th April, 1896).

20	... Map of Sewerage system (special expenses)	. . Writtle.
25	... Building houses without drains (special expenses)	Great Baddow s.d.d., Ingatestone & Fry- erning, Springfield, Widford, Writtle.
26 ¹	... Providing penalty for building over sewers (special expenses)	... Writtle.
39	... Providing public necessities (special expenses)	Ingatestone & Fry- erning, Springfield, Writtle and Great Baddow s.d.d.
47 ²	... Stagnant water under houses (special expenses)	Great Baddow s.d.d., Broomfield, Stock, Great and Little Waltham, Writtle, Widford.

Section.	Subject.	Parishes to which powers apply.
47 ^s	... Allowing cesspools, &c., to overflow (special ex- penses)	Great Baddow s.d.d., Broomfield, Stock, Great and Little Waltham, Writtle, Ingatstone and Fryerning, Widford, Springfield.
160 ^s	... Ruinous buildings (special expenses)	... The whole district.

Conferred July 9th, 1898.

277	... Constitution of Writtle s.d.d	Writtle.
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Conferred January 26th, 1900.

42	... Removal of house refuse, &c.	Great Baddow s.d.d., Broomfield, Ingate- stone and Fryerning, Springfield, Little Waltham, Writtle s.d.d. (Gt. Waltham, March 8th, 1902) (and Widford, 24th June, 1914).
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Conferred September 29th, 1900

(came into operation 22nd October, 1900).

Private Street Works Act, 1892.	(Excepting sewerage of streets (special expenses)	Springfield specified streets.
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Conferred June 21st, 1904

(came into operation 11th July, 1904).

Do.	... Do.	... Springfield, Gains- borough Crescent.
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Conferred October 12th, 1905

(came into operation 30th October, 1905).

Section.	Subject.	Parishes to which powers apply.
26. ¹	... Providing penalty for building over sewers (special expenses)	Writtle s.d.d.

Conferred August 23rd, 1907

(came into operation 16th September, 1907).

161. ¹	... Street Lighting (special expenses)	... Margaretting. ... Widford (24th June 1914).
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Conferred 14th April, 1909.

229, 230	... Remuneration of Water Rate Collectors (special expenses)	Danbury, East Hanningfield, Ingatestone & Fryerning, Little Baddow, Rettendon, Runwell, Sandon, Widford, Woodham Ferris, Gt. Baddow s.d.d., Writtle s.d.d.
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Conferred 15th July, 1915.

229, 230	... Remuneration of Water Rate Collectors (special expenses)	Broomfield.
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Conferred 23rd November, 1922.

42	... Removal of house refuse, &c. (special expenses)	Buttsbury.
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Conferred 3rd June, 1892.
Public Health Acts (Amendment) Act, 1890.

Section.	Subject.	Parishes to which powers apply.
23 ... (so much as not already in force).	Relating to Bye-laws as to (1) water closets, (2) struc- ture of floors and height of rooms, (3) paving of yards, (4) Secondary means of access for removal of house refuse.	Whole district (came into operation 4th July, 1892).

Adoptive Acts.

Infectious Disease (Notifica- tion) Act, 1889	Came into operation 1st January, 1890
Infectious Disease (Preven- tion Act, 1890.	Came in force April 1st, 1891
Public Health Acts (Amend- ment) Act, 1890 (Part III., clauses applicable to rural districts, <i>i.e.</i> , sections made applicable by resolution of a Rural District Council with- out the necessity of a special order of the Ministry of Health).	Came in force April 1st, 1891, for the whole district.

Conferred 17th June, 1912
(came into operation 29th July, 1912).

Public Health Acts Amendment Act, 1907.	For the whole district.
Relating to Streets and Build- ings	Secs. 15, 16, 20, 22, 23, 24, 27, 29, 30, 31, 32 and 33 in Part II.
Sanitary provisions	... Secs. 34, 35, 36, 37, 38, 43, 44, 45, 46, 48, 49 in Part III.

Public Health Acts Amendment
Act, 1907.

Infectious Diseases ... Secs. 52, 53, 54, 55, 56, 57, 58,
59, 60, 62, 63, 64, 65, 67 in
Part IV.

For the whole district.
For Great Baddow s.d.d., Ingatestone
and Fryerning, Widford and Writtle
s.d.d.

Sanitary provisions ... Secs. 39, 40, 41 and 42 in Part
III.

Bye-laws and Regulations adopted.

1. Relating to the cleansing of footways, removal of house refuse, cleansing cesspools, &c. Applicable to all the district except Great Baddow, Great and Little Waltham, Broomfield and Writtle, 1894.
2. Relating to Nuisances ... Whole district, 1894.
3. Relating to New Streets and Buildings Apply to whole district. Adopted 1914, the older 1903 series being repealed.
4. Relating to Offensive Trades Apply to Great Baddow s.d.d., Broomfield, Ingatestone and Fryerning, Great and Little Waltham and Writtle, 1894.
5. Regulations under Dairies and Cowsheds Order Apply to whole district. Adopted in 1906 to replace older regulations.
6. Relating to Tents, Vans and Sheds Adopted 1909, and apply to the whole district.
7. Relating to Slaughter-houses Amended and made applicable to the whole district, 1923.
8. Relating to the Regulation of Galleywood Common Adopted 16th September, 1924.

WATER SUPPLY.

Throughout the district there are five important waterworks owned and controlled by the District Council, and at the end of 1925 the following tabular statement gives the number of houses in the parishes and the number of houses supplied from the mains from these works :—

Parish.	Number of houses at end of 1925.	
	Total (estimated)	Supplied with water from mains.
Great Baddow	825	542 (supply limited to Great Baddow s.d.d.
Springfield	110	1
Broomfield	352	310
Ingatestone & Fryerning	528	381
Writtle	699	354 (Supply limited to Writtle s.d.d.; 15 of these are from the Corporation mains).
Danbury	371	293
East Hanningfield	116	94
Little Baddow	166	127
Rettendon	207	182
Runwell	124	71
Sandon	140	65
Woodham Ferris	371	318
Widford	87	63 (Supplied from Borough of Chelmsford's mains. Rate equals 1s. 6d. in £ on rateable value).
	4096	2801

A few houses in the parish of Buttsbury are supplied from the mains of the Southend Waterworks Company.

The mains from the various waterworks are shown on the map facing page 64 and further particulars with a short history of each of the waterworks is given in the following pages.

By the Southend Waterworks Act, 1924, authority is given to Southend Waterworks Company to supply water over a small area in the parish of Buttsbury; this area is shown on the map facing page 64.

At present the scale of charges made by the Southend Waterworks Company for water supplies is as follows:—

For Domestic supplies:—14 per cent. of the annual rental value of premises (for example, dwelling house of annual rental of £25, the charge is £3 10s. a year, or 17s. 6d. a quarter, but all dwelling houses of annual rental value of £7 and under the charge is at the rate of 4s. 10d. per quarter).

In addition for every w.c. beyond the first there is an extra charge of 2s. 6d. per quarter.

In addition for every bath, capacity not exceeding 50 gallons, an extra charge of 5s. per quarter.

Bath exceeding 50 gallons capacity or of a special type by agreement.

For offices, shops and warehouses not used as dwelling houses, and where there are no special trade requirements for water the charge is half the ordinary domestic charges, but the scale of charges outlined above for w.c.'s. and baths is the same as for dwelling houses.

The Company has also a scale of charges for water supplied by meter and for gardens, lawns and fire supplies, etc.

When the new works at present under construction at Langford, authorised by the Southend Waterworks Act, 1924, are completed, it is possible that the above charges may be varied.

GREAT BADDOW WATERWORKS.

The original works date back to 1881; on 8th November of that year the first loan was obtained. The works completed then consisted of an underground covered reservoir of brickwork—the water from springs rising through the gravel bottom of the reservoir. The water at that time was pumped by a gas engine

to a tank of 33,000 gallons erected on a brick tower 100 feet high. The works are on the north side of Baddow Road near the Borough of Chelmsford, and were for the supply of water to Great Baddow s.d.d. and Springfield.

An additional engine and pump was fixed at the works in 1894, and permanent staging placed round the tower tank. From time to time the mains were extended and by 1898 it was realised that the springs were not sufficient to supply the increasing number of houses being erected in the two parishes.

In 1900 there was 22,783,000 gallons of water supplied from the works equivalent to about 18 gallons per head per day. In 1900 the Local Government Board sanctioned the construction of a bored well at the works in order to obtain water from the Thanet sands or the chalk. The work was commenced in March, 1901 and completed during 1902.

The table on page 42 gives particulars of layers through which the bore pierced. These are given in order from surface levels onwards.

The portion of the tube well below the London Clay through the water bearing strata is provided with a perforated tube. At this time the water level in the bored well rose up to 80 feet below ground level but by 1925 dropped some feet, but fluctuates according to quantity extracted.

During 1904 a new engine house was erected in which was installed a 20 B.H.P. Campbell gas engine, an Alley & McLelland air compressor and a Campbell treble ram pump, this plant lifting the water from the bored well to the tower tank. The old gas engine and double ram pump were replaced by a Tangye gas engine of 16 B.H.P. coupled direct by a friction clutch to a treble ram pump (Tangye's) of 10,000 gallons per hour capacity. In addition to these improvements a pressure recording guage was installed and fittings provided so as to automatically increase the pressure in the mains while pumping was

in progress. To improve the supply at Springfield an additional 6-in. main was laid from the works to the higher portion of Springfield.

During 1907 the Borough of Chelmsford was extended to include the area in Springfield (except one house) supplied from the Baddow Waterworks—the new Ward (Springfield) added to the Borough was still to obtain its water supply from the Baddow works, as set out in the Order. Meters are provided for ascertaining the quantity of water supplied to Springfield Ward in the Borough and the area in the rural district.

To protect the springs the Council decided in 1912 to apply to the Local Government Board for sanction to purchase the field adjoining the waterworks. The Local Government Board refused sanction but subsequently the field was purchased.

During 1913 samples from the springs were found to contain B. Coli in 1 c.c., but since that year the springs have shown no sign of pollution. In 1921 B. Coli were reported to be present in the water supplied to the Springfield Ward in the Borough. Investigations suggested this was caused by the wooden float in the overhead tanks. After the Engineer replaced the wooden float by a metal one no further samples were found to contain B. Coli.

The provision of mechanical filters during 1914 was not approved of by the Local Government Board and the Board suggested the Council to consider the provision of a slow sand filtration system. This has not been provided.

During 1920 the pumping plant was rearranged, an addition made to the engine house and a new gas engine of 35 B.H.P., and suction plant installed.

Owing to a series of dry years, the yield of water during 1921 was considerably down but it was not necessary to restrict the supply to the consumers until the following year when it was cut down for a period of two months to 14 hours per day. Since then the supply has been constant.

In 1924 an additional air compressor (Reavell) was installed as a duplicate. With this addition the pumping plant is in duplicate. The quantity of water supplied from these works during a series of years was as follows:—

During 1900	...	22,783,000	gallons.
„ 1904	...	32,135,000	„
„ 1906	...	32,455,959	„
„ 1907	...	30,415,182	„
„ 1908	...	29,472,000	„
„ 1909	...	29,808,000	„
„ 1910	...	31,582,000	„
„ 1911	...	33,955,000	„
„ 1912	...	34,747,000	„
„ 1913	...	32,559,000	„
„ 1914	...	35,540,000	„
„ 1922	...	32,096,000	„
„ 1923	...	29,103,000	„
„ 1924	...	31,326,000	„
„ 1925	...	36,819,000	„

The water mains from these works supplying areas in the rural district is given in the map facing page 64. The mains in Great Baddow parish consist of:—

1,400	yards of 6-in.
1,117	„ 5-in.
1,083	„ 4-in.
4,372	„ 3-in.
1,170	„ 2-in.

Total ... 9142 yards = 5 miles 342 yards.

The source of water at the springs is from the superficial gravel but there is a presumption that the gravel is divided into two sections by a thin layer of clay and that the spring water is derived from the lower section of gravel. This may explain its freedom from pollution as the area near the springs is comparatively well built on.

The amount of water available from the springs varies according to the amount of rainfall. In a series of dry years it

falls to about 70,000 gallons daily, while in a series of wet years the yield increases to over 100,000 even up to 140,000 gallons daily. From the deep bored tube the yield is about 70,000 gallons daily.

The quality of water both from the springs and bored tube is excellent. The well water is not so hard, being 4° while that of the springs is 10° (grains per gallon).

The following gives the chemical analysis of both sources of water at Great Baddow Waterworks :—

		Parts per 100,000.	
		Spring Water.	Bored Well Water.
Total solids dried at 180° c.	...	26·8	112
Chlorine	...	3·2	38·6
Nitric Nitrogen	...	·6	·08
Nitrites	...	absent	absent
Lead, copper, tin, iron	...	absent	absent
Free ammonia	...	·004	·08
Organic ammonia	...	·002	·002
Oxygen absorbed at 37° c. in			
three hours	...	·008	·04
Hardness in grains per gallon	Total 10°	...	4°
	Temporary	3½°	

The following are the particulars of premises supplied from Great Baddow Waterworks (exclusive of premises supplied in the Springfield Ward of the Borough of Chelmsford) at the end of 1925 :—

Parish.	Domestic or for Combined Domestic and Trade Purposes.	For Trade Purposes only.
Great Baddow...	542	19
Springfield ...	1	—
Sandon ...	9	1
Totals ...	552	20

The present water rate (per annum for domestic purposes) is 1s. in the £ on the rateable value.

GREAT BADDOW WATERWORKS.

Particulars of Strata of bored well 411 feet deep (350 feet of 10-inch diameter and 61 feet 8½-inch diameter).

Description.	Thickness of each stratum.		Total depths from surface.		Remarks.
	Feet.	Ins.	Feet.	Ins.	
Top Soil ...	2	...	2	...	
Yellow Clay ...	1	6	3	6	
Yellow Gravel ...	10	6	13	6	
Red Loamy Sand ...	1	...	14	6	
Yellow Gravel ...	12	...	26	6	
Black Gravel ...	1	6	28	6	
Yellow Loamy Sand ...	1	...	29	...	
Yellow Gravel (very sandy) ...	9	6	38	6	
Brown Clay ...	1	6	40	...	
Blue Clay ...	14	...	54	...	
Clay Stone ..	...	6	54	6	Water level in bore at completion of works 80 feet from surface.
Blue Clay ..	68	...	122	6	
Clay Stone ...	...	6	123	...	
Blue Clay ...	141	6	264	6	
Dark Grey Dead Sand ...	16	6	281	..	
Grey Rock ...	1	6	282	6	
Dark Grey Dead Sand ..	12	...	294	6	
Black Pebbles ...	1	...	295	6	
Live Grey Sand ...	5	...	300	6	
Dead Sand and Shells ..	1	6	302	...	
Dark Grey Dead Sand ..	13	...	315	...	
Mottled Clay (sandy) ..	28	6	343	6	Bottom of 10 feet pipes 350 feet from surface.
Dead Grey Sand ...	64	...	407	6	
Green Flints ...	1	6	409	...	
Chalk ...	2	...	411	...	Bottom of 8½ feet perforated pipes 411 feet from surface.

Level of surface of ground above O.D. 100 feet.

INGATESTONE WATER SUPPLY.

As far back as 1884 there was a public water supply at Ingatestone. The original supply was got by opening of spring or springs by a series of shallow wells. The quantity was about 14,000 gallons per day but owing to clayey matter in suspension it was treated with a little alumino-ferrie and filtered through polarite and flannel. The reservoirs were in duplicate so that the water in one was settling while the other was being drawn off. The water reached the village of Ingatestone by gravitation. The supply was intermittent. The yield showed a marked decrease from 1886 onwards. The supply showed signs of pollution and the District Council considered alternative schemes. In 1900 sanction was obtained from the Local Government Board to sink a 10-in. tube well through the London clay—the boring was in progress in 1900. Very little water was obtained in the Thanet beds and when the chalk was reached at 646 feet there was no improvement in the quantity, but when boring was continued into the chalk for over 100 feet the water rose rapidly in the tube to 198 feet below ground level—this was in 1901. The construction of the permanent works was proceeded with. It was decided to sink a well, 6 feet diameter, round the bore for the first 350 feet. The dug well, which stores the water that rises in the tube, is lined in the lower section with 9-in. brickwork and above this with cast iron cylinders. The bore is continued for over 450 feet down to a depth of 800 feet from the ground level. Particulars of strata pierced are shown on the table on page 44.

The works were not fully completed before 1906, but the water was used, the old mains being utilised for the purpose.

The engine house of brickwork and tiled roof erected over the well has the following pumping plant installed :—

One two-throw deep well pump with Ashley buckets rated at 5,000 gallons per hour.

INGATESTONE WATERWORKS.

Particulars of strata of bored well 800 feet deep (568 feet 9 inches of 10-inch tube, 138 feet 3 inches of 8½-inch pipes and 59 feet of 7¼-inch perforated pipes).

Description.		Thickness of each stratum.		Total depth from surface.		Remarks.
		Feet.	Ins.	Feet.	Ins.	
London Clay.	Gravel and Sand ...	2	...	2	..	A well 6 feet in diameter has been dug round the borehole to a depth of 350 feet.
	Sandy Loam ...	4	6	6	6	
	Blue Clay ...	...	9	7	3
	Sandy Loam ..	12	9	20	..	
	Blue Sandy Clay ...	7	...	27	...	
	Blue Clay and Clay Stones ...	33	...	60	...	Water level in bore at completion of works 200 feet below surface.
	Blue Sandy Clay ...	22	...	82	...	
	Blue Clay with Shells in lower 2 feet ...	434	...	516	...	
	Blue Sandy Clay with Pebbles in lower foot	16	...	532	...	
	Hard Sand Rock ..	31	..	563	...	
	Running Sand and Shells	2	...	565	...	Bottom of 10-inch pipe 568 feet 9-inch from surface.
	Peat, Clay, Shells and Stones ...	13	..	578	...	Bottom of 8½-inch pipe 707 feet from surface.
	Thanet Sand ...	8	...	586	...	
	Thanet Sand (Green) ...	12	...	598	...	
	Thanet Sand ...	49	...	647	...	
	Green Flints ...	..	6	647	6
	Chalk and Flints ...	152	6	800	...	Bottom of 7¼-inch perforated tube 766 feet below surface (34 feet uplined).

Level of surface of ground above O.D. 255 feet.

One single acting pump (first used in the bored well and afterwards fixed in the well) rated at 4,000 gallons per hour.

Two high speed treble ram pumps, each rated at 5,000 gallons per hour.

One National gas engine of 18 B.H.P. with suction gas plant.

One Cundell oil engine of 20 B.H.P. (originally fixed to drive the pump, temporarily fixed in the bored well).

The pumping plant is in duplicate and so arranged that either engine will drive either of the deep well pumps at the same time as each of the treble ram pumps. A water motor for driving the starting fan on the suction gas plant is provided and a bunker for storing 20 tons of anthracite coal.

At Mill Green a covered concrete service reservoir of 75,000 gallons capacity, with dividing wall to facilitate cleaning, is provided. The top water level is approximately 320 feet above O.D. In the engine house is a self-recording pressure gauge and water level indicator electrically connected with the reservoir.

The deep well pumps lift the water from the well to a small tank at surface level from which the treble ram pumps lift the water to the reservoir at Mill Green. In the absence of a water tower houses at or above the level of the reservoir are on an intermittent service, being supplied during pumping hours by increasing the pressure in the mains to give the necessary supply.

The quantity of water has not been maintained, the Ingatstone deep well being no exception to other deep wells in the London basin. The water level originally was 198 feet below the ground level; at the present time it is 320 feet below the ground level or a drop of 120 feet. As would be expected this led to a good deal of difficulties, and in 1920 two shallow wells were utilised to supplement the supply, and in 1924 an agreement was

entered into with the Southend Waterworks Company and a connection was made from that company's mains at their Mountnessing waterworks. By this means the supply at Ingatestone can be augmented, but is not available for the higher parts as the source of supply is lower than the Mill Green reservoir.

When the 1906 works were completed the following mains had been laid :—a 5-in. main from the reservoir to High Street ; a 4-in main from the reservoir to near the " Woolpack " Inn ; and a 3-in. main from the reservoir to Mill Green Common. Since then considerable extension of mains has been carried out, and the following gives particulars of the lengths of mains provided in connection with these works :—

2433 yards of 5-in. mains

800	„	4-in.	„
6750	„	3-in.	„
1370	„	2-in.	„

11,353 = 6 miles 793 yds.

The quality of water is good as indicated by the following chemical analysis :—

	Parts per 100,000
Total solids dried at 180° c.	... 80
Chlorine ... ..	... 23·3
Nitric nitrogen ... ..	... ·05
Nitrites ... ..	... absent
Lead, copper, tin, iron ...	... absent
Free ammonia ... ..	... ·006
Organic ammonia ... ..	... ·002
Oxygen absorbed in 3 hours at 37° c. ...	... ·04

Hardness in grains per gallon ... 4°

The quantity of water supplied from the works for a series of years is as follows:—

During 1907 there was supplied 6,610,896 gallons

„ 1908	„	7,037,800	„
„ 1909	„	7,984,200	„
„ 1910	„	9,333,700	„
„ 1911	„	9,182,000	„
„ 1912	„	10,524,950	„
„ 1913	„	9,784,000	„
„ 1914	„	10,939,000	„
„ 1922	„	7,206,000	„
„ 1923	„	9,098,298	„
„ 1924	„	9,785,904	„

(In addition 317,900 galls. were taken from Southend Co.)

„ 1925	„	11,159,710	„
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(In addition 1,203,500 galls. were taken from Southend Co.)

The following are the particulars of premises supplied from the works at the end of 1925:—

For domestic or domestic and trade combined	...	381
For trade purposes only	... ..	24
		<hr/>
Total	... ..	405
		<hr/>

The present water rate (per annum for domestic purposes) is 1/6 in the £ on the rateable value.

DANBURY AND OTHER PARISHES.

In 1890 the supply in Danbury was from various private shallow wells, and a number of cases of sore throat in the village led to an investigation of the water from these wells. Most of them were found to be polluted. It was then suggested to the District Council that a remarkably strong spring of water on the Common should be utilised for supplying the village. A scheme for

forcing the water by means of a ram to a tower and for distributing it to stand pipes in various parts of the parish was approved by the Rural Sanitary Authority and application made to the Local Government Board for sanction to borrow the necessary money.

In 1891 this scheme was completed. The spring (Buell's Well) being about one mile from the village and 180 feet below the highest point to which the water had to be driven. The tank of about 3,000 gallons capacity supplied 60 houses and a number of standpipes, the total cost being about £800. In 1892 the Sanitary Authorities of Maldon and Chelmsford appointed Sub-Committees to consider the supply of Purleigh, Hazeleigh, Woodham Mortimer and Cold Norton from the Danbury mains. Estimates were prepared, but the scheme did not materialise.

During the same year a water main was carried from Pear Tree Corner to Slough House—a distance of about one mile—to supply the farms and cottages *en route*.

In the year 1896 (November 4th) an inquiry was held to enable the Council to borrow £4,000 to extend the then existing system of mains to Woodham Ferris Station, Battlesbridge, Runwell Village and to Little Baddow; also to erect two oil engines and pumps, one of 2,000 gallons per hour capacity, and one of 3,000 gallons per hour capacity at Danbury to replace the ram.

At this time cottages at Howe Green and Butts Green in Sandon Parish were dependent on pond supplies and it was therefore agreed to extend the mains to these two places.

In 1897 a 75,000 gallons reservoir was erected at Rettendon with top water level 180 feet above O.D. In 1899 after a series of successive dry seasons, there was a scarcity of water which was accentuated by the defects in the works. It was therefore decided to purchase certain lands upon which there is a spring and to remedy the defects in the existing system.

Continued extension of the mains took place and there was an increasing demand for water.

In 1901 an enquiry was held by the Local Government Board to consider an application from the Council to borrow £4,430 for a period of 30 years, to :—

- (a) Construct a high level reservoir on the Danbury Common (299 ft. + O.D.)
- (b) To connect the mains to the Rettendon reservoir as originally required by the Local Government Board.
- (c) To lay pipes under the Common to collect subsoil water.
- (d) To purchase Thomas' spring and 22 acres of surrounding land.

The Local Government Board did not approve of this scheme, but subsequently approved of part of the scheme, and in 1902 Thomas' spring with a large area of land around was acquired, which considerably improved the then existing supply,

In 1904 the small pump was replaced by one of 4,500 gallons capacity.

An additional storage tank (now used as a pump receiving well) was provided in 1907 at the works and the area of supply was extended.

The following year it was found that the walls upon which the tank rested were five inches out of the perpendicular. This tank only held 2,700 gallons and in 1910 a steel tank 15 feet in diameter and 12 feet deep, having a capacity of 13,000 gallons, was erected and this was completely supported by and enclosed in a substantial brick tower, built wholly in cement mortar on a massive cement concrete foundation and covered with a tiled roof. The tower was in actual use by November of that year. In the

year 1911 the Danbury Waterworks were supplying 66 houses in Little Baddow, 177 in Danbury, 85 in East Hanningfield, 168 in Rettendon, 56 in Runwell, 45 in Sandon and 241 in Woodham Ferris.

The springs at this time yielded on an average 60,000 gallons per day, or 24,000 gallons more than the average need. The supply was of good quality, of a hardness of 7° and adequate and constant. The three service reservoirs had a total capacity of about 120,000 gallons.

By the completion of the new water tower on Danbury Hill a constant supply was furnished to Little Baddow.

In order to maintain a supply in East Hanningfield, Rettendon and Woodham Ferris, arrangements were made in 1912 for pumping to be carried on for 6 hours each Sunday.

The following year (1913), owing to main extensions and the amount of water required, it was decided to fix a new engine and pump in order to cope with the work, and these were fixed in 1914. The engine was an oil engine of 11 B.H.P. driving a pump of 5,000 gallons per hour. In 1925 a 13 B.H.P. high compression cold starting Campbell oil engine was installed. These two engines and pumps replaced those originally fixed and increased the pumping capacity to 9,500 gallons per hour.

Owing to the yield of the spring being down it was necessary in 1922 to partially restrict the supply during August, when a contract was entered into with the Southend Waterworks Co. to augment the supply from that company's mains. This arrangement is still in operation, although during 1924 the yield of the springs considerably improved. The arrangement with the Southend Waterworks Co. is useful for emergency purposes.

The water supplied from the Danbury Waterworks during a series of years was as follows :—

During 1904 there were 16,019,410 gallons supplied.

„	1906	„	12,055,133	„
„	1907	„	12,436,465	„
„	1908	„	12,554,500	„
„	1909	„	11,859,400	„
„	1910	„	13,109,700	„

During 1911 there were 16,356,300 gallons supplied. .

„	1912	„	16,149,500	„
„	1913	„	16,371,000	„
„	1914	„	18,748,000	„
„	1922	„	13,837,800	„

(In addition 876,000 galls. were taken from Southend Co.)

„	1923	„	16,097,786	„
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(In addition 1,546,700 galls. were taken from Southend Co.)

„	1924	„	17,023,095	„
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(In addition 468,000 galls. were taken from Southend Co.)

„	1925	„	22,489,160	„
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(In addition 670,000 galls. were taken from Southend Co.)

From time to time the mains have been extended and in 1923-4 about 2,600 yards were laid.

The total length of mains in the district is as follows :—

958 yards of 4-in. pumping mains.

533 „ 5-in. distributing mains.

6,107 „ 4-in. „

40,525 „ 3-in. „

9,250 „ 2-in. „

750 „ 5-in. connecting Thomas' spring to reservoir

58,123 = 33 miles 43 yards

In addition there are :—

1,000 yds. of 1-in. wrought iron tube used as mains

333 yds. of $\frac{3}{4}$ -in. „ „

The following is a chemical analysis of the water from the springs at Danbury :—

		Parts per 100,000.
Total solids dried at 180° c.	...	17·3
Chlorine	... ..	2·6
Nitric nitrogen	... ..	·91
Nitrites	... ..	absent
Lead, copper, zinc, iron	... ..	absent
Free ammonia	... ..	·001
Organic ammonia	... ..	·008
Oxygen absorbed at 37°c. in 3 hours...		·02
<hr/>		
Hardness total grains per gallon	..	9°

During June, 1922, a householder complained that worms were present in the water taken from his tap. These were identified by the British Museum Authorities (Natural History) as *Tubifex Rivulorum*—a form of earth worm. As these were confined to that portion of service pipe supplying one of three houses, probably the worms obtained entrance to the service pipe through a slight local defect.

The following are the particulars of premises supplied from these works at the end of 1925:—

Parish.	Domestic or Trade and Domestic.	Trade Purposes only.
Danbury	293	3
East Hanningfield	94	1
Little Baddow	127	1
Rettendon	182	3
Runwell	71	—
Sandon	56*	1
Woodham Ferris...	318	9
	<hr/>	<hr/>
	1141	17
	<hr/>	<hr/>

*In addition 9 in this parish were supplied from Great Baddow Works.

The present water rate per annum for domestic purposes is as follows :—

Danbury	...	2/-	in the £ on the rateable value
East Hanningfield	...	2/6	" "
Little Baddow	...		
Rettendon	...		
Runwell	...		
Sandon	...		
Woodham Ferris	...	"	"

WRITTLE WATER SUPPLY.

Prior to 1890 the lower part of the village of Writtle was supplied by water from a standpipe belonging to the Writtle Brewery Company (these buildings are no longer used by a Brewery Company). At that time the Brewery Company allowed water to be taken by all comers. The rest of the village had not a proper and sufficient water supply.

In 1892 the Council decided to provide a public water supply for Writtle and in 1893 plans were submitted to the Local Government Board. The Local Government Board held an enquiry on 10th June, 1894, relative to the application of the District Council to borrow £950 for sewerage and £1,800 for water supply to Writtle.

The proposal at that time was to provide water from springs some distance from the village and from human habitation.

The Sanitary Authority suggested a special rating area which the Local Government Board was not willing to agree to and withheld the sanction until 1897, when a special District both for water and sewerage was sanctioned—the area being the ecclesiastical parish of Writtle.

The proposed supply from springs was not proceeded with and in 1900 the District Council invited tenders for boring a deep tube well at the top of Oxney Green. Messrs. J. Taylor, Sons

and Santo Crimp, of Westminster, were the engineers of the Scheme. The boring was in progress in 1901 and completed in 1902. There was considerable difficulty experienced as the result of sand being drawn with the water. Owing to the amount of sand it was decided to put in an air lift instead of a deep well pump. The depth of the well is 575 feet the particulars of strata passed through being as follows :—

WRITTLE WATERWORKS.

Particulars of Strata of Bored Well.

Description.	Thickness of Strata.		Depth from Surface.		Remarks.
	Feet.	Ins.	Feet.	Ins.	
(Glacial Drift) Gravel ...	50	...	50	...	Water level rose to 99 feet below surface.
London Clay	249	6	299	6	
(Lower London Tertiaries) Sands ..	150	6	450	...	When 450 feet deep the well yielded a fair amount of water which was sandy.
(Upper) Chalk ...	125	...	575	...	On boring being continued into the chalk nearly all the water disappeared. The chalk bore was plugged and the yield increased as above.

Level of surface above O.D. 88 feet.

Owing to the difficulty arising from the large quantity of sand in the bore the progress of the work was slow and was not completed until 1905, in that year water was being laid on to the houses.

At the Waterworks, situated in the north side of the County road at Great Oxney Green, Writtle, is provided an engine and pump house of brickwork, with a brick water tower adjoining in which is placed a circular steel tank of 22,000 gallons capacity, top water level being 231 feet above O.D. Settling channels and sand filters were also provided, but the sand filters were aban-

done as they became choked. In 1907 a Bell's mechanical filter was installed, prior to passing the water through the filter a small quantity of sulphate of alumina was added to the water. The water turned out after this treatment (namely sulphate of alumina and filtration) was satisfactory. For some time the sulphate of alumina has not been necessary. The pumping plant provided is in two units (not arranged for cross driving), each comprising one air compressor, one treble ram pump rated at 1,500 gallons per hour capacity and one oil engine of 16 B.H.P. capacity (one of these was replaced in 1918 by a gas engine of 19 B.H.P. with suction gas plant). The well and air lift is not in duplicate. As early as 1908 difficulties from the falling of the water level in the bore were experienced which were partly overcome by prolonging the pumping hours, and in 1909 the hours of supply were slightly restricted.

These difficulties became so serious in 1915 that arrangements were made with the Brewery Company to obtain an additional quantity of water from what is known as the Brewery supply—this was the supply to the lower area of Writtle in 1850—and is obtained from an open reservoir known as "The Canal," the water rising through the gravel bottom. The water was pumped from a well in the Brewery Yard. From time to time improvements were carried out with the bored well, but it was realised that the quantity of water obtained from this source was not sufficient to supply the area, so when the Brewery building was sold an agreement was entered into with Miss Usborne who had procured the rights to "the Canal" to use the water from the canal for a period of seven years, with the option of an extension. A garage at the Brewery was hired for housing the machinery. Possession was taken in July, 1925. An oil engine of 7 H.P. (used previously at Danbury) and a treble ram pump was installed. A gas engine (Town's gas) with a treble ram pump is also provided so that the plant is in duplicate, each unit capable of pumping 2,000 gallons per hour, each can be worked separately, or when desired the two can be worked at the same time.

In the original scheme the following mains were laid :—

	1,300 yards of 4-in.	
	3,630 „ 3-in.	
	300 „ 2-in.	
Since then	450 „ 3-in.	have been laid.

Total... 5,680 = 3 miles 400 yards.

A portion of the parish of Writtle, adjoining Rainsford End of the Borough of Chelmsford, is supplied by meter under agreement from the mains of the Chelmsford Corporation. In this area there are—

193 yards of 4-in. mains
127 „ 3-in. „

which makes a grand total of 3 miles 720 yards in the Writtle s.d.d.

The following gives the chemical analysis of both sources of the water supply at present supplied from Writtle Waterworks :—

	Parts per 100,000.			
	Brewery "canal"		Council's deep well.	
Total solids dried at 180° c. ...	47	...	96	
Chlorine ...	5.0	...	26.4	
Nitric nitrogen ...	.82	...	.03	
Nitrites ...	absent	...	absent	
Lead, copper, zinc, iron ...	absent	...	absent	
Free ammonia ...	.007	...	.006	
Organic ammonia ...	.006	...	.004	
Oxygen absorbed at 37° c. in 3 hours	.065	...	.1	
<hr/>				
Hardness in grains per gallon ...	21°		5°	

In "the canal" some trouble was caused by the growth of algæ, but this has been kept under control by the application of small quantity of chloride of lime.

The quantity of water supplied from Writtle Waterworks was as follows :—

During the year 1908 there were 3,532,000 gallons.

„	1909	„	4,151,400	„
„	1910	„	4,282,400	„
„	1911	„	4,527,700	„
„	1912	„	4,897,700	„
„	1914	„	6,282,000	„
„	1922	„	6,268,380	„
„	1923	„	6,045,230	„
„	1924	„	7,808,070	„
„	1925	„	9,554,595	„

The following are particulars of premises supplied from these works at the end of 1925 :—

For domestic or domestic and trade purposes combined	339
For trade purposes only	4
	<hr/>
	343
In addition in this parish there are supplied from the Corporation of Chelmsford's mains ...	15
	<hr/>
Total ...	358
	<hr/>

The present water rate (per annum for domestic purposes) is 2/6 in the £ on the rateable value, this also applies to houses supplied from the Corporation mains.

BROOMFIELD WATERWORKS.

Prior to 1914 Broomfield depended mainly upon private shallow wells for its water supply. As early as 1909 a deep well scheme for a public supply was formulated and in 1910 the District Council was anxious to provide for Broomfield a public water supply and sewerage system. In that year application was made

to the Local Government Board for sanction to borrow £850 for a trial bore and £1,525 for the purchase of land for the purpose of sewage disposal. Ultimately the land for sewage was purchased but the provision of sewers, etc., at the request of the parish was not proceeded with—the parish preferred the water scheme first, and the rateable value was such that the parish could not have both the sewerage and water schemes at the same time.

In 1911 the boring was made and abundance of good water found and details for a complete scheme were then prepared and by the end of 1913 the wells had been completed, mains laid and engine house ready to have the machinery installed.

The works situated on the south side of Chelmsford-Braintree main road 1,200 yards south of the Church consist of:—

Two bored wells 8 feet apart both 320 feet deep.

No. 1 lined with 11½-in. steel tubes to the base of London clay and then with 10 in. perforated steel tube (this was the trial bore).

No. 2 lined with 14-in. steel tubes to base of London clay and with 12-in. perforated steel tubes in the remaining portion.

The water level in the tubes rose to within 60 feet of the ground level.

Particulars of the various layers pierced are shown in detail in the tabular statement on page 59.

The buildings consist of engine and pump house of brick-work, settling bays and clear water tank, coal bunker, producing plant, shelter and meter house. Two steel water towers, each surmounted by a tank of 8,834 gallons capacity, one situated at the waterworks with top water level 164 feet above O.D., the other at Parsonage Green with top water level 192 feet above O.D.

BROOMFIELD WATERWORKS.

Particulars of strata of bored wells.

No. 1. 321 feet 6 inches deep (229 feet of 11½-inch pipes, 92 feet 6 inches of 10-inch perforated pipes).

No. 2. 321 feet 6 inches deep (229 feet of 14-inch tube, 92 feet 6 inches of 12-inch perforated pipes).

Description.	Thickness of each stratum.		Total depths from surface.		Remarks.
	Feet.	Ins.	Feet.	Ins.	
Top Soil ...	1	...	1	...	Water level in bore at completion of works 60 feet below surface.
Brick Earth ...	6	...	7	...	
Flints, Gravel and Sand ...	8	...	15	...	
London Clay.	London Clay ...	97	...	112	Bottom of 11½-inch pipes in No. 1. Bottom of 14-inch pipes in No. 2 229 feet below surface.
	London Clay and Silty and Loamy Clay ..	85	...	197	
	Stone ...	1	...	198	
	Silty Clay ...	10	...	208	
	Stone ...	1	...	209	
	Dark Silty Clay ...	7	...	216	
	Silty Clay and Pebbles	4	...	220	
	Sandy Clay and Pebbles ...	6	...	226	
	Hard Sand ...	3	...	229	
	Clay and Pebbles ...	2	...	231	
Woolwich and Reading Beds.	Red Mottled Clay ...	3	...	234	Bottom of 10-inch pipes in No. 1. Bottom of 12-inch pipes in No. 2 321 feet 6 inches below surface.
	Green Sandy Loam ...	4	...	238	
	Green Silty Clay ...	12	...	250	
	Grey Clay and Pebbles	6	...	256	
Thanet Sands.	Watery Sand ...	2	...	258	
	Firm Dry Sand ...	12	...	270	
	Fine Grey Sand ...	30	...	300	
	Close Hard Sand ...	13	...	313	
	Green, Brown, Black and Grey Mottled Sand ...	7	...	320	
Chalk and Flints ...	1	6	321	6	

Level of surface of ground above O.D. 110 feet.

The pumping plant is in two units. Each unit with a capacity of 5,000 gallons per hour consists of one borehole pump with Ashley's patent bucket, one treble ram surface pump, one 25 H.P. Campbell gas engine, one suction gas producing plant, air compressor and receiver for engine starting. The whole is so arranged that each engine can be utilised to drive any combination of pump and obtain gas from either of the gas producing plants. One engine can also drive the whole of the plant at half speed. In practice, owing to the presence of sand, it has been found that the best method of working the plant is pumping at the rate of 2,500 gallons per hour from each bore well, 5,000 gallons is obtained per hour and very little sand is pumped up.

The water lifted by the pumps from the bored wells is delivered into the settling bays where any sand present in the water settles, and the water then passes to the clear water tank from where it is pumped by the treble ram pump to the tank on the towers above referred to. It is so arranged that the tank at Parsonage Green is filled first, when the tank is full a ball valve comes into action and stops any further water getting into the tank and automatically increases the pressure which overcomes a loaded valve in the tank at the waterworks. In this way the man at the waterworks is able (without leaving the works) to tell when the tank at Parsonage Green is full.

At the works there is a recording pressure gauge, station meter and a water motor is provided for blowing the producer plant for starting.

The mains laid are as follows :—

178 yards of 5-in. mains			
2,715	„	4-in.	„
1,496	„	3-in.	„
and in addition 140	„	3-in.	„ was laid in 1925
<hr/>			
4,529 yards	=	2 miles 1,009 yards	

The quantity of water supplied from the works for a series of years was as follows :—

During 1914 there were 3,848,000 gallons supplied from the works

„	1922	„	18,213,700	„	„
			(Including 8,948,000 supplied to Borough of Chelmsford)		
„	1923	„	15,604,900	„	„
			(Including 5,358,000 supplied to Borough of Chelmsford)		
„	1924	„	13,380,000	„	„
			(Including 3,940,000 supplied to Borough of Chelmsford)		
„	1925	„	15,915,200	„	„
			(Including 5,605,000 supplied to Borough of Chelmsford)		

The following gives the chemical analysis of water supplied from Broomfield Waterworks :—

		Parts per 100,000.
Total solids dried at 130° c.	...	104
Chlorine	..	34.2
Nitric nitrogen	...	.05
Nitrites	...	Absent
Lead, copper, zinc, iron	...	Absent
Free ammonia	...	.08
Organic ammonia	...	.001
Oxygen absorbed in 3 hours at 37°c....		.056
Hardness grains per gallon	...	5.7°

The following are the particulars of premises supplied from the works at the end of 1925 :—

310 for domestic or a combined domestic and trade supply.

2 for trade purposes only.

Total 312

The present water rate per annum for domestic purposes is 2/6 in the £ on the rateable value.

VARIOUS SUPPLIES.

BOREHAM (Census pop. 1,023). During 1914 the Parish Council assisted by private subscriptions carried out improvements to the village water supply. A new collecting tank was provided and the water which is a spring supply conveyed in iron pipes to the "spout" near the church from which the public obtain their water.

From a spring Boreham House is supplied by gravitation and on the way connections are made to supply Cheese House Farm and Boreham Hall Farm. In the parish there is also one public pump near the Women's Institute.

LITTLE WALTHAM (Census pop. 668). In the village a small tank collects water from a spring. From the tank it flows by gravitation to standpipes in the village. In addition there are two public pumps—the water being from the same source.

GREAT WALTHAM (Census pop. 2,063). In the village a hydraulic ram forces water from a spring into an elevated tank from which the water is taken to standpipes. In addition, there is a spout from a spring near the bridge.

Ford End. There is a piped supply from a spring leading to a "spout" at bottom of the hill and one public pump near the School.

North End. There is a piped supply from a spring and one public pump.

Broads Green. There are two public pumps.

Chatham Green. One public pump.

STOCK AND BUTTSBURY (Census population, 1,532). Under the Southend Waterworks Act, 1924, a small area of Buttsbury parish is included in the Company's area of supply. The area is shown in the map facing page 64. The remaining area of the two parishes has a large population depending upon five public wells in addition to private supplies (one near School, one in

Back Lane near Village of Stock, one on Village Green, Stock, and one in Workhouse Lane; the first two are in Buttsbury parish, the last two in Stock parish).

In the remaining areas of the district there are the following public supplies provided :—

Parish.	Population, 1921.			Public supply.
Chignal	...	367	...	Two pumps (one near Pig and Whistle, one near Stevens' Farm).
Good Easter	...	417	...	Two pumps.
Great Leighs	...	676	...	Two pumps (one near school and one on main road near St. Anne's Castle).
Little Leighs	...	136	...	One pump near Mann's Bakery.
Margaretting	...	593	...	Five pumps (one on Village Green, one near School, one on road leading to Galleywood, two at Margaretting Tye, one of the last two not in use).
Pleshey	...	278	...	Three pumps.
Roxwell	...	749	..	One pump and a spring supply near church piped to side of road.
Hanningfield, West		526	...	Pump near Steven's Farm (Five Chimney)
„ South		238	...	Two pumps (one near Blacksmith's, one in Seaman's Lane, in addition there is a dipping well on road to Runwell).

Parish.	Population, 1921.			Public supply.
Springfield	...	445	...	One pump in Well Lane and a dipping well at Brook End near Public house.
Widford	...	370	...	Supplied from Chelmsford Corporation main (charge, 1/6 per annum on rateable value).

The outlying areas of the following parishes (the populous areas are supplied from mains) are provided with the following public supplies :—

DANBURY. One public pump near Gay Bowers.

EAST HANNINGFIELD. Two public pumps—one on Green and one on main Rettendon Road near “Plough and Sail.”

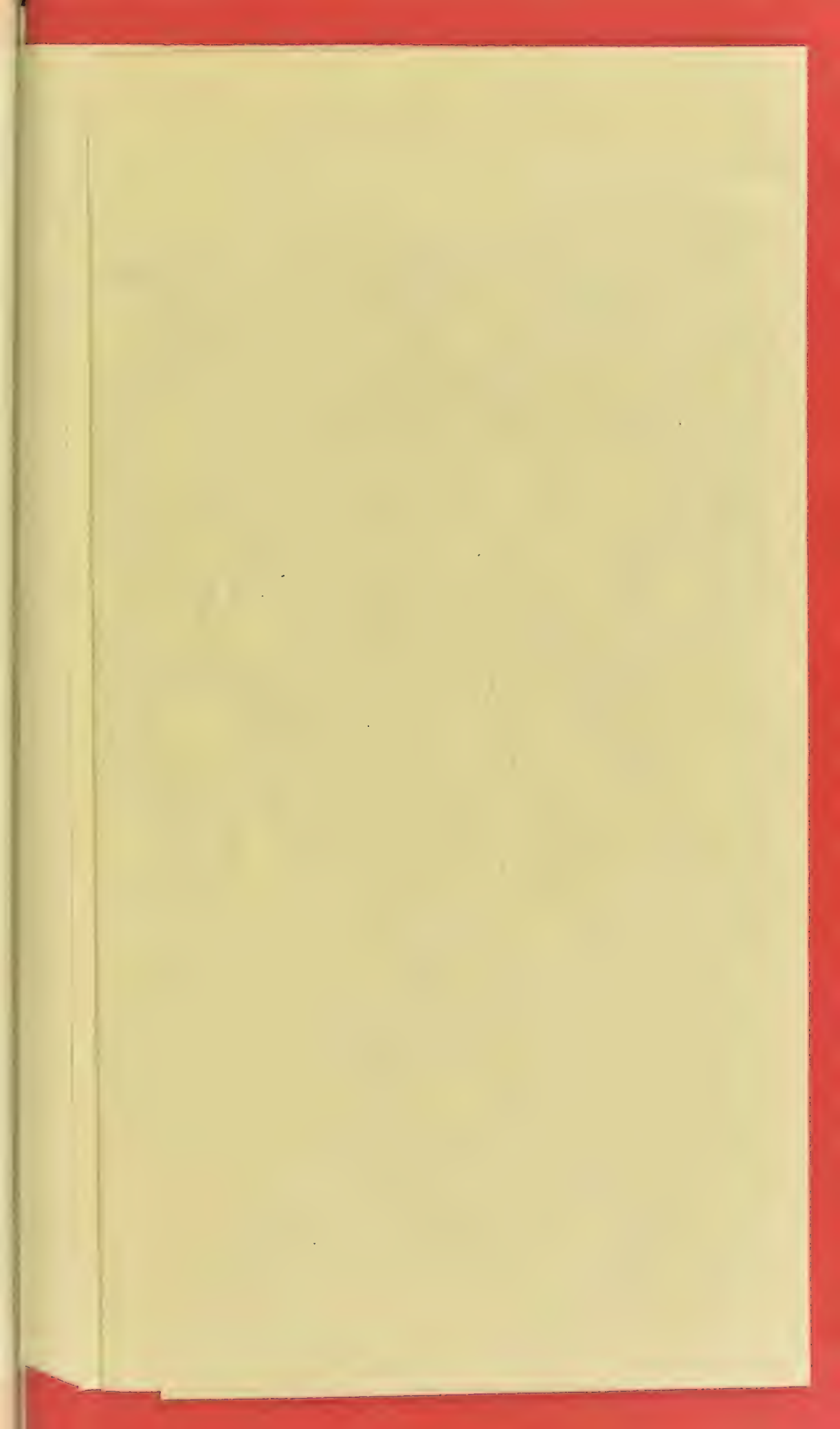
GALLEYWOOD, in parish of Great Baddow. Three public pumps—one near Great Seabright's Farm, one near Chapel in Well Lane, a piped supply is taken from this well to Lower Green, and one near Old Post Office. There is also a dipping well on London hill.

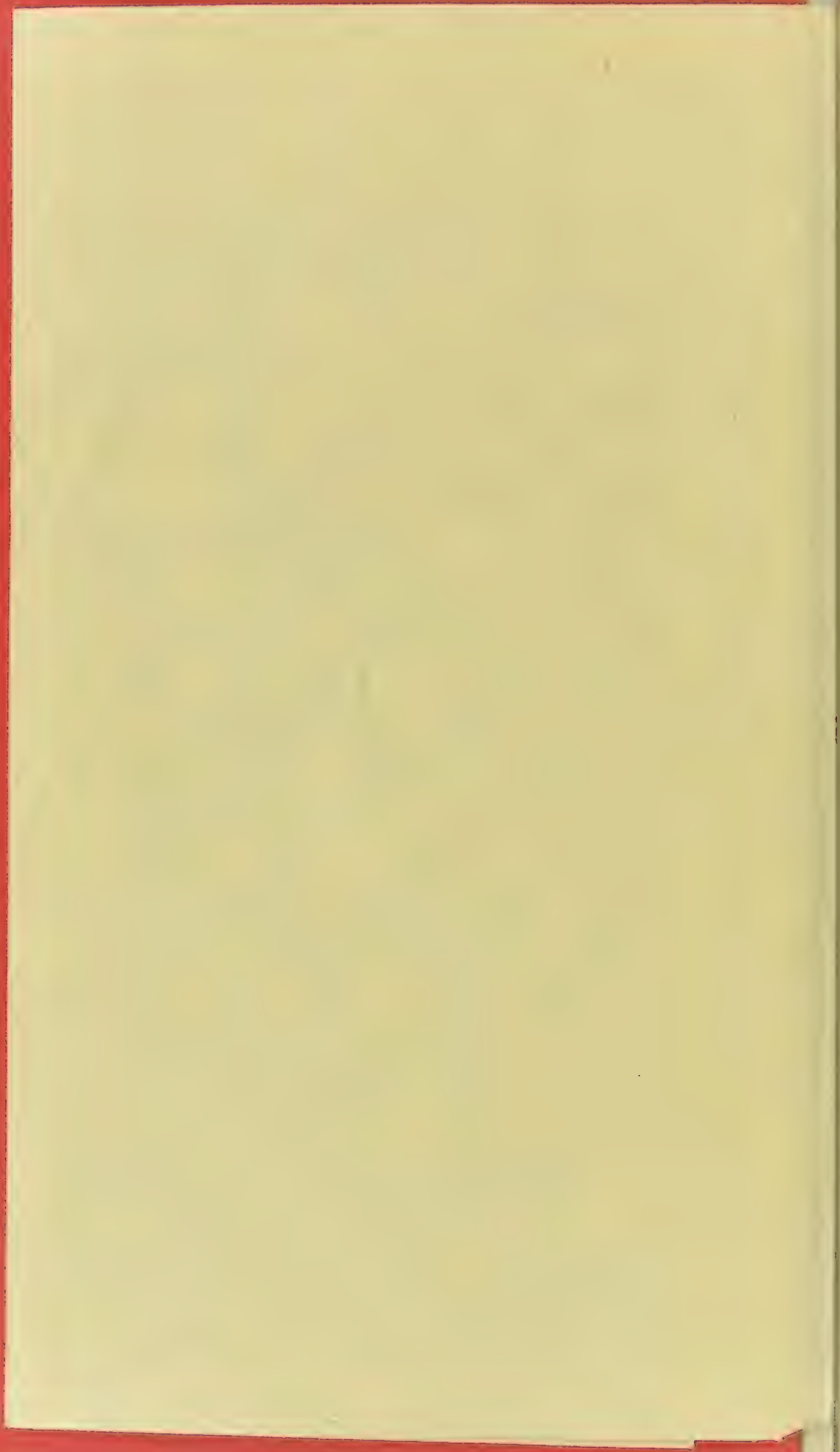
FRYERNING. One public pump near “Viper” public house. One public pump on Beggar's Hill. One public bucket well on Beggar's Hill.

HIGHWOOD, in Writtle Parish. Rain water supply at Radley Green to a pump. Two public pumps—one near Smithy and one near Cock Inn, the latter not in use.

SANDON. Three public pumps—one at Dealtrees, one near School, one on Green supplied from a well near Council cottages. One dipping well on side of road (near Sandford Mill) leading to Springfield. This well supplies houses on opposite side of road which are in Great Baddow parish.

Under the Chelmsford Corporation Water Act, 1923, and the Southend Waterworks Act, 1924, the District Council are given certain rights to obtain water from these new works authorised by these Acts.





It may be possible to augment the water supplies of parishes already with main supplies and to extend the mains to supply other parishes.

RIVERS AND STREAMS.

Particulars of the rivers and streams are given on pages 7, 8 and 9, and points where effluent from sewerage works flows into the rivers is given under Drainage and Sewerage.

DRAINAGE AND SEWERAGE.

There are properly constructed public sewers in the parishes of Great Baddow, Widford, Ingatestone & Fryerning and Writtle. There are purification works dealing with the sewage from these parishes ; further details are given under each parish.

GREAT BADDOW S.D.D. AND WIDFORD. There are properly constructed sewers in these two parishes. The sewage from these two parishes, along with that from the Borough of Chelmsford, is treated by Broad irrigation on a farm of over 100 acres situated in the rural part of Springfield parish. The control of the purification is by a Joint Sewerage Committee representing the Borough and Rural District Councils, who are the joint owners. The Rural District Council originally contemplated using the farm, but the then Sanitary Authority of the Borough expressed a desire to join, hence the formation of the Joint Sewerage Committee. The Agreement was entered into on 26th November, 1879. At that time 107 acres 1 rood 37 poles were acquired, and in 1914 a further 40 acres 1 rood and 12 poles were acquired, making a total of 147 acres 1 rood and 9 poles. Recently considerable improvements have been carried out. The effluent is discharged into the River Chelmer below the proposed Corporation waterworks. The Southend Waterworks Act, 1924, provides for the piping of the effluent to below where water is to be abstracted from the Chelmer for the Southend Waterworks at Langford, in Maldon rural district.

INGATESTONE AND FRYERNING. The original sewers in this parish date back to over 40 years and have been extended from time to time. About 1886 treatment of the sewage was undertaken by Broad irrigation on about nine acres of land—the land was rented to a farmer who entered into a contract to treat the sewage. This arrangement worked so unsatisfactorily that the working of the sewage farm was taken over by the Council in 1907.

From time to time the sewers were extended and new houses added so that the amount of land available was not sufficient to deal efficiently with the volume of sewage reaching the works. In 1920 the Council purchased 21 acres of land and added it to the sewage farm, making a total of 32 acres. The effluent since then has been satisfactory and no complaints have been received lately from the County Council regarding the standard of purification.

WRITTLE. In the village portion of the parish, tenants and owners of property connected their drains to the highway drains which gradually did duty as sewer for the village. By 1890 the number of houses so connected resulted in the outfall, which was into a ditch, to be sometimes very offensive. By 1893 the District Council submitted plans to the Local Government Board for the proper sewerage of the village portion of the parish and making the expenses special on the area sewered. The Local Government Board at first refused to the making of a special area and did not agree until 1897 when the ecclesiastical parish was approved as the s.d.d.

By the end of 1905 sewers were completed and 234 houses connected. At that time 98 further houses remained to be connected to the sewers.

The sewage reaches the works by high and low level sewers, the latter draining the lower portion of the village. The purification works consisted originally of a sedimentation tank and four bacterial beds, but in 1913 one of the bacterial beds was converted into a sedimentation tank.

Owing to the increased population the effluent has not been always satisfactory and at the end of 1924 negotiations were opened with the Borough of Chelmsford to ascertain on what terms the Writtle sewage would be allowed to flow through the Borough sewers and treated at the joint sewerage farm in Springfield parish mentioned in connection with Great Baddow and Widford sewerage.

The two authorities have agreed to this principle and by the beginning of 1926 application had been made to the Ministry of Health for sanction to borrow the necessary money to carry out the work.

This, when carried out, should result in a permanent solution as far as the pollution of the river from the Writtle effluent is concerned.

BROOMFIELD. There are a number of ditches in this parish that receive the drainage of house property. The more important ones are :—

Ditch near Mill Lane, which receives drainage from a number of houses ;

Ditch near water works which receives drainage of Clobbs Cottages ;

Ditch at rear of coffee house which receives drainage of houses near.

These ditches are cleaned from time to time by the Council.

A spring stream passing underneath the road at the bottom of Patching Hall Lane receives the drainage from premises in the lane.

Broomfield, with its abundant water supply, naturally increases the volume of drainage and the provision of a proper sewerage system for this populous parish is becoming more or less urgent.

Under the Chelmsford Corporation Act, 1923, Section 32, the District Council is entitled to certain benefits relating to expenses incurred in carrying out purification works for this parish.

At the beginning of 1926 the Council had approved and submitted a sewerage scheme for this parish.

BUTTSBURY AND STOCK. There is an old sewer which drains most of the village and discharges into a ditch below the church. There are also several private cesspools. The large number of houses recently erected in this part of the district, especially in Buttsbury, has created a drainage problem. Nuisances are caused from the overflowing and the emptying of cesspools. Proper sewerage system is needed for this area.

DANBURY. No sewers. Some waste water drainage discharge into ditches.

MARGARETTING. The drainage from a number of houses in the village was by a road drain which discharged into a ditch. During 1919 complaints were received regarding the foul condition of the ditch and it was decided to divert the drainage from the ditch by the provision of a 6-in. drain. This was carried out during 1920 and the sewage treated by means of a septic tank.

PLESHEY. No sewers. Some waste water is drained to road drain.

RETTENDON AND BATTLESBRIDGE. There are no sewers in Rettendon village. At Battlesbridge most of the drainage goes into the tidal river --mainly by direct drains from premises.

GREAT WALTHAM. Prior to the year 1890, the drains of a number of houses in the village of Great Waltham were connected to the highway drains and discharged into the brook. During 1893, small settling tanks and filters were provided at the two outfalls. In 1895, a new sewer was laid to replace the old barrel sewer. In 1898, further improvements were carried out to the sewers and the sewage collected into settling tanks before being discharged into the brook. At present, the sewage is collected in settling tanks filtered through gravel before being discharged into the brook. The effluent has not always been satisfactory.

LITTLE WALTHAM. The road drains in the village receive the drainage from a number of houses. These discharge into the river. The drainage from two slaughterhouses has recently been disconnected from the road drains. Under Section 32 of the Chelmsford Corporation Act, 1923, the District Council is entitled to certain benefits relating to the expenses incurred in carrying out purification works for this parish.

ROXWELL. The drainage from a number of houses is connected to the road drain. The drains from a few houses go direct to the brook.

WOODHAM FERRIS. As in many other parishes the drainage from houses discharges into road drains, which ultimately finds its way into open ditches. In 1895 the road drains were improved by the provision of gullies in the road and the outfall was carried further from the village. In 1910 further improvements were carried out.

BOREHAM. No proper sewers. The drainage from a few houses discharges into open ditches.

LITTLE BADDOW. The drainage from a few houses finds its way into open ditches.

There is nothing special to note regarding the drainage of the remaining parishes which are sparsely populated.

CLOSET ACCOMMODATION.

The following table shows the approximate number of sanitary conveniences of the various types in the district at the end of the year :—

Number of water closets with proper flushing arrangements	...	...	...	1,669
Number of water closets hand flushed	...		...	447
Number of pail closets, a small proportion of which have an arrangement of distributing dry earth				3,176
Number of privies	...	...	...	1,214
Number of privies abolished during the year			...	7

The old type of privy is very objectionable and it would be pleasing to be able to cause a greater number of conversions to either water closets or pail closets.

SCAVENGING.

Since the beginning of April, 1922, the District Council has undertaken departmentally the removal of house refuse from Great Baddow (s.d.d.), Broomfield, Ingatestone, Widford and Writtle (s.d.d.) and the removal of night-soil from Broomfield and parts of Great Waltham and Little Waltham parishes.

The night-soil removal from some 45 houses in Battlesbridge is undertaken by a contractor as the distance from the other areas in which the work is undertaken by the Council is too great.

During 1922 arrangements were made with a contractor to remove house refuse in the more populous area of the Parish of Buttsbury. During 1924 this area was extended to include a further 12 houses and in 1925 was further extended. The number of houses in this parish from which refuse is collected is 74. Building is progressing considerably in Buttsbury and it is felt that in the very near future the Council will be obliged to consider a further extension of the scavenging area.

In the rest of the district, which is sparsely populated, each householder disposes of the refuse by utilising it for the garden.

There were never so few complaints concerning scavenging as during 1925, so that one may assume that the efforts put forth to make this work exemplary were considered fairly satisfactory.

During the summer of 1924, handbills were circulated in the schools of the parishes from which refuse is collected departmentally and these were taken home or distributed by the children. At this time refuse receptacles were very much

misused. Much combustible material was placed therein which ought to have been burned on the kitchen fire. In certain cases liquid matter was deposited in the dust-bins. This is very unsatisfactory and causes a nuisance. It also increases the difficulty of removal both from the practical and sanitary points of view.

The circulation of these handbills (copy appended) was decidedly advantageous, the steady improvement in the type of refuse removed being very marked. The bulk of refuse was also reduced, thereby giving your workmen more time to attend to the ever increasing number of houses, and instead of another whole-time man having to be appointed to help to cope with this, it was found necessary for the time being to employ only a part-time man. A recent investigation has revealed the fact that it costs the country £6,000,000 a year to collect and dispose of house and trade refuse and it is asserted that over £250,000 would be saved annually if each householder would burn two pounds of rubbish each week instead of putting it into the dust-bin.

Defective ashbins or unsuitable forms of storage are reported by your workmen to the Office and action is taken without delay, the owners concerned being requested to provide a new galvanised iron ashbin with cover.

During 1925, 31 ashbins of this type were provided as a result of Informal Notices and only in one case was it necessary to serve a Statutory Notice. Suitable available tipping land is very difficult to obtain. At Great Baddow a disused gravel pit is used on farm land about a mile from the village, at Ingatestone and Writtle accommodation is provided on the sewage works land whereas at Broomfield an old gravel pit on land belonging to the Council has been acquired. The night-soil is taken and disposed of by farmers in the parishes concerned, viz., Broomfield, Great Waltham and Little Waltham.

[COPY OF HANDBILL CIRCULATED DURING 1924.]

CHELMSFORD RURAL DISTRICT COUNCIL.

PUBLIC HEALTH DEPARTMENT.

REFUSE COLLECTION.

The Ash Bin is intended for Ashes and Dry Refuse Only and should not be used for Garden Refuse. It should be kept covered.

The best method of disposing of vegetable and animal refuse, paper, cardboard and similar refuse, is to burn it on the kitchen fire.

Fish and Meat Offal should be dealt with in the same manner.

Tea Leaves should be drained in a small sieve and then burned on the kitchen fire.

Wet refuse rusts the bin.

If the bin is placed on the wet ground the bottom is quickly rusted out; it should therefore be placed on bricks.

Cardboard Boxes make good firelighters and it is better to use them as such, rather than place them in the ashbin.

It is wasteful in two ways to deposit Cinders in the ashbin:

1. Good fuel is thrown away.
2. The amount of refuse to be collected and disposed of is increased.

Flies are attracted by a smelling ashbin and after going among the refuse they make their way into the house, carrying a certain amount of filth on their feet to your food.

If these suggestions are acted upon, no disinfectants will be needed, no bad smells will arise, and you will be helping the District Council in maintaining an efficient Scavenging Service.

Rural District Council Offices,
Waterloo Lane,
Chelmsford.

SANITARY INSPECTION OF THE AREA.

An increase in the number of inspections has to be recorded in consequence of the administration of the Public Health (Meat) Regulations 1924, which came into operation on April 1st, 1925, and the work connected with scavenging, inspection of water supplies, cowsheds and dairies, etc., entails a corresponding amount of necessary clerical work.

In March you appointed Mr. J. H. Lewis as your Second Sanitary Inspector and instead of the District being divided into two areas as formerly, Mr. Lewis was given special duties to perform (as given on page 28), which were approved by the Ministry of Health. This arrangement has proved satisfactory from all points of view, although owing to illness and a motoring accident to Mr. Lewis while on duty, and necessitating an absence of several weeks, the work has suffered.

It will be noticed however, that a very considerable amount of sanitary work has been carried out and it is gratifying to report that much of this has been done as a result of informal notices and personal interviews. On the whole, credit must be given to property owners for their willingness to carry out necessary works, and advice is always readily given when desired.

There was continued activity during the year with a view to bringing all cowkeepers' premises up to a reasonable standard and credit is due to the farmers who have so willingly complied with the Council's requirements regarding the improvement of their dairy premises with a view to a clean milk supply being obtained. There is a greater desire than ever for a pure and clean milk supply.

Disinfection is carried out after cases of infectious diseases and disinfectants are supplied gratis by the Council in such cases.

The Report will be found to contain a review of the work of your Inspectors and shows the progress made during the year.

INSPECTION WORK.

The following table shows the amount of routine inspection work performed by your Sanitary Inspectors:—

Nature of Inspection.		Number of				
		Total Inspections.	Notices served.		Notices.	
			Informal.	Statutory.	Complied with.	Outstanding.
General Housing Inspections :—		225				
Infectious Diseases :—						
Enquiries .	26	26	...	...	...	...
Dwelling Disinfection ...	42	42	...	...	...	...
Houses Ordinary Nuisances ...	8	8	1	...	4	1
Structural Defects...	62	62	15	1	10	5
Overcrowding	20	20	...	5	6	...
Schools ...	12	12	...	...	...	...
Milk Shops ...	9	9	...	...	...	...
Dairies and Cowsheds ...	384	384	19	11	32	6
Bakehouses ...	22	22	...	1	1	...
Privies ...	27	27	5	1	6	1
Water Closets ...	25	25	17	...	5	1
House Drainage all forms ...	98	98	16	3	21	1
Water Supply ...	91	91	5	1	6	...
Pig Styes ...	5	5	1	...	3	...
Animals improperly kept ...	...	...	...	...	...	...
Slaughterhouses and Shops ...	288	288	18	...	16	...
Knackers Yards ...	2	2	...	...	...	...
Other Nuisances ...	19	19	3	...	2	...
Ashbins ...	140	140	27	1	31	1
Sanitary Inspections ...	155	155	1	1	1	...
Re-Inspections ...	236	236	...	...	...	...
Rats and Mice Inspections ...	4	4	...	...	...	...
Tents and Vans ...	6	6	...	...	...	...
MISCELLANEOUS ...	60	60	...	...	1	...
Totals	...	1966	128	25	145	16

NOTICES.

Two kinds of notices are served, the Preliminary or Informal Notice, and the Statutory or Legal Notice.

The circumstances of each case determine what particular kind of notice is served. It is, however, the general practice in almost all cases to serve a preliminary notice in the first instance and if this is not complied with in the required time, then a Statutory Notice is served by registered post. It was only necessary in the year under review to serve 25 Statutory Notices and 128 Preliminary Notices.

At the end of the year only 16 notices (all forms) were outstanding and work was actually in hand in each case.

PRIVATE IMPROVEMENT WORKS.

Private improvement works are not executed by your staff, although supervision and advice is given when possible.

COMPLAINTS.

A record of all forms of complaint has been commenced during the year. All complaints are carefully investigated, and in many cases the complaints are unfounded, whereas in others the source is that of a private grievance, often with neighbours, the complainants evidently hoping and relying on your Inspectors to settle differences of all descriptions.

SMOKE ABATEMENT. No cause for action to be taken during the year.

PREMISES AND OCCUPATIONS WHICH CAN BE CONTROLLED BY BYE-LAWS OR REGULATIONS.

SLAUGHTERHOUSES. These are dealt with on the following two pages and under the heading "Inspection and Supervision of Food" on page 99.

KNACKERS' YARDS. There is one in the district, in the parish of Great Baddow.

DAIRIES AND COWSHEDS. These are dealt with under the heading "Inspection and Supervision of Food" on page 94.

LIST OF SLAUGHTERHOUSES AND PARTICULARS.

Situation.	Construc- tion.	Floor.	Drainage.	Water Supply.	Collection of Manure and Offal.	Any Dwelling house within 100 feet.	Provision for Cattle with water.	Whether registered or licensed.	Remarks.
Great Baddow (Copsey)	Timber (fair)	Flag- stones (fair)	Sewer ...	Main	Manure removed weekly from covered pit. Offal daily.	Yes	2 pens with water	Registered	Covered manure pit in yard.
Roreham (Emeny)	Timber (good)	Cement (good)	Cesspool	Well	Manure taken to adjoining field and cleared at intervals. Offal cleared at each time of killing.	"	2 pens ...	"	No manure pit.
Broomfield (Bussey)	Brick (good)	Cement (good)	Sewer ...	Well	Manure each month. Offal put in manure pit.	"	1 pen ...	"	Good manure pit, but no cover.
Danbury (Croxon)	Timber (fair)	Flag- stones (fair)	Ditch ...	Main	Both removed daily.	"	1 pen with water	"	Drainage not satisfactory (every care taken to prevent nuisance).
Ingatstone (Green)	Brick (good)	Cement (good)	Sewer ...	Main	Both removed daily.	"	2 pens with water	"	Very near to a number of houses, main London Road and a bakehouse.
Ingatstone (Vincett)	Brick (good)	Cement (good)	Sewer ...	Main	Both removed after slaughtering.	"	1 pen ...	Licensed (P)	Transferred from G. H. Archer to W. N. Vincett in November, 1925.
Great Leighs (Wright)	Timber (good)	Cement (good)	Cesspool	Well	Put on manure heap.	"	1 pen ...	" (A)	First licence granted April, 1925.
Stock (Wright)	Timber (fair)	Cement (fair)	Cesspool	Well	Manure heap.	"	1 pen ...	" (P)	Rarely used, killing done in Chelmsford. Transferred from C. Knightbridge, May, 1925.

LIST OF SLAUGHTERHOUSES AND PARTICULARS—*continued.*

77

Situation.	Construction.	Floor.	Drainage.	Water Supply.	Collection of Manure and Offal.	Any Dwelling house within 100 feet.	Provision for Cattle with water.	Whether registered or licensed.	Remarks.
Little Waltham (Campen)	Brick (good)	Cement (good)	Cesspool	Main	Manure heap in field.	Yes	2 pens	Licensed (P)	No manure pit.
Little Waltham (Wroot)	Timber (good)	Cement (good)	Cesspool	Main	Put on manure heap.	"	2 pens	Registered	No manure pit. Slaughterhouse adjoins house and shop.
Great Waltham (Campen)	Timber (good)	Cement (good)	Sewer	Public spout	Put on manure heap.	"	2 pens	"	Transferred from W. Luckin, February, 1925.
Hartford End, Great Waltham (Cass)	Timber (good)	Cement (good)	Cesspool	Well	Manure heap in field.	No	Pens	Licensed (A)	Converted from a barn to a good slaughterhouse under advice from Sanitary Authority, first licensed April 28/1925.
Little Baddow (Puddephatt)	Timber (fair)	Cement (good)	Cesspool	Well	Manure heap. Offal removed after killing.	"	Field	" (A)	Converted from shed to a small slaughterhouse under advice from Sanitary Authority, first licensed March 3/1925.
Mashbury (Matthews)	Brick (good)	Cement (good)	Cesspool	Well	Manure heap.	"	Several pens	" (A)	Converted from stable under advice from Sanitary Authority, first licence granted November 10/1923.
Writtle (Green)	Timber (good)	Cement (good)	Sewer	Main	Removed to manure heap.	Yes	2 pens	Registered	No manure pit. Great care is taken to ensure no nuisance arising.
Cookswill Green, Writtle (Butt)	Brick (good)	Cement (good)	Cesspool	Well	Removed to manure heap.	"	Several pens	Licensed (A)	First licence granted December 9th, 1924, for year 1925.

(P) Permanent Licence (renewal not necessary if use continued, erected after 11th August, 1875, and before 5th June, 1922). (A) Annual Licence. (First licensed after June 5th, 1922). At the end of the year improvements were under consideration to a building proposed to be used as a slaughterhouse at West Hanningfield and which the Council have decided to licence, subject to the improvements being satisfactorily completed.

CELLAR DWELLINGS. There are none in the district.

COMMON LODGING HOUSES. There are none in the district.

HOUSES LET IN LODGING. There are none in the district.

OTHER SANITARY CONDITIONS REQUIRING NOTICE. There are no important matters beyond those referred to under their respective headings.

SCHOOLS. Inspections have been made of the schools in the District and the table opposite this page shows the sanitary condition and water supply in each case.

HOUSING.

For many years, especially in the outlying agricultural parishes, the number of houses erected year by year has not been sufficient to meet the requirements of the population and replace old cottages that were not really fit for human habitation.

The number of houses erected year by year since 1901, classified according to parish, is given in the table on page 80.

At the present time there are many cottages in the district that cannot be described as "in all respects reasonably fit for human habitation."

Sometimes when an Officer makes a representation for a Closing Order relative to a dwelling-house, he is asked about the age of the occupier, and if the answer indicates that the occupier is of an advanced age, it is used in evidence against the making of a Closing Order, overlooking the fact that the mature years of the occupier is not due to the housing conditions under which he lived but in spite of it.

For many years the District Council has realised that in many parishes the rents obtainable are not sufficient to encourage private enterprise to provide the cottages required.

TAE

School.

Great Baddow ...

Little Baddow ...

Boreham ...

Broomfield ..

By the beginning of 1914 the District Council completed its first lot of houses.

These consisted of :—

6 in Danbury—2 parlour and 4 non-parlour types.

4 in Sandon of the non-parlour type.

6 in Little Baddow of the non-parlour type.

Total 16

At that time the District Council contemplated erecting further houses but the war prevented further progress until 1920 when the first lot of houses under the Housing, Town Planning, etc., Act, 1919 (Assisted Scheme) was commenced. Under this scheme 154 houses were erected.

A summary of the final statement of expenditure under this scheme is given on page 85.

This table shows that in a number of parishes land was purchased but the Ministry of Health, before the houses could be erected, had decided to curtail the erection of houses under this scheme. Under the Assisted Scheme the contribution of the District Council towards the annual deficit is limited to the product of a penny rate, the rest being a charge on the Treasury.

The provision of further houses by the District Council remained in abeyance until 1925 when the Council decided to erect houses under the Housing (Financial Provisions) Act, 1924. If the table on page 84 is referred to it is seen that of the 122 houses which the Council had received sanction to erect no fewer than 90 has since been commenced and of these 16 had actually been completed by the end of the year.

The distribution of those completed is given in column 4 of the table on page 83, and further detailed particulars of the number of houses sanctioned and the subsequent progress made is given in the table on page 84.

HOUSES ELECTED FROM 1901 TO 1925.

PARISH.	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
Gt. Baddow ..	13	3	2	7	17	10	14	9	7	18	19	5	8	15	5	2	1	..	1	3	45	34	17	16	31
Lt. Baddow ..	1	..	..	1	1	1	1	2	..	4	2	..	..	6	..	..	..	..	1	4	7	2	1	5	1
Ereham ..	..	..	..	..	1	..	..	..	..	..	11	..	..	2	3	..	..	..	1	2	..	..	1	2	7
Broomfield ..	2	..	..	8	12	9	8	6	12	20	13	6	8	4	..	..	..	..	1	2	..	3	3	..	1
Buttsbury ..	2	2	1	1	8	5	5	3	2	4	6	3	4	4	5	5	..	..	1	7	26	27	51	27	16
Chignall ..	..	..	..	..	..	..	..	2	..	..	..	1	1	1	..	..	..	..	..	..	1	1	..	..	2
Danbury ..	2	2	4	3	6	..	3	1	5	5	1	6	2	10	3	1	..	..	..	..	30	21	18	16	26
Good Easter...	..	..	..	..	..	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	6	..	..	..	..
East Hanningfield	..	..	1	1	3	1	..	1	..	..	1	1	..	2	..	..	..	..	..	..	1	..	..	3	4
South Hanningfield	..	..	..	..	2	..	..	1	1	1	..	..	2	..	..	1	..	..	..	1	4	1	2	..	..
West Hanningfield	2	..	1	..	1	1	..	..	1	1	..	5	1	..	..	..	..	..	..	3	5	1	3	2	5
Ingatstone & Fryerning	1	7	..	6	2	5	6	4	13	12	8	16	7	2	2	2	..	..	..	2	14	18	5	3	6
Great Leigh ..	..	1	..	..	3	..	..	..	2	1	..	2	..	..	1	..	..	..	..	..	..	..	1	..	1
Little Leighs	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Margaretting	2	..	..	2	..	..	4	..	1	..	..	..	..	..	..	..	..	..	..	6	..	..	..	..	1
Mashbury ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pleshey ..	..	6	..	1	..	..	2	..	1	..	2	3	..	2	..	..	..	..	3	3	1	6	2	..	2
Rettondon ..	..	..	..	2	..	3	3	4	1	..	1	1	..	..	..	..	..	..	..	2	3	1	..	..	..
Roxwell ..	..	1	1	2	..	1	..	..	3	..	..	..	3	1	1	2	..	..	..	7	3	11	4	..	5
Runwell ..	..	..	..	..	1	..	..	2	7	3	1	1	..	4	..	..	..	..	..	1	1	..	..	..	..
Sandon ..	3	1	1	1	8	3	2	2	..	2	2	1	..	4	..	..	..	..	..	1	1	1	..	2	2
Springfield ..	23	12	7	3	25	10	8	1	1	1	4	2	3	1	4	1	..	..	..	1	..	1	3	4	4
Stock ..	..	1	..	1	..	2	3	3	..	1	4	2	3	1	4	1	..	..	..	..	2	2	1	1	6
Great Waltham	..	2	..	..	3	3	2	1	..	4	1	6	4	2	1	..	..	..	..	..	1	1	1	..	5
Little Waltham	..	1	..	..	..	..	..	..	2	3	2	2	2	1	..	..	..	..	..	1	1	..	..	..	..
Widford ..	..	..	..	..	..	1	..	2	4	..	..	2	2	4	..	..	..	..	..	..	1	1	..	..	..
Woodham Ferris	7	..	2	2	10	14	7	3	3	5	2	2	2	4	3	..	..	..	..	6	29	28	21	15	9
Writtle ..	8	9	9	2	1	4	1	..	1	..	9	9	10	4	..	..	..	..	..	2	17	7	10	5	12
Total ..	71	43	28	44	102	77	73	47	65	83	93	71	59	69	51	18	1	..	3	36	205	162	158	117	146

The figures include houses erected by the District Council; for particulars of these see page 83.

Under the Housing (Financial Provisions) Act, 1924 all the parishes in the district with the following exceptions rank as agricultural parishes for purpose of grants :—

Broomfield.
 Danbury.
 Great Baddow.
 Ingatestone.
 Margaretting.
 Widford.

Under the Act for houses erected by the District Council in these parishes there is a Treasury grant of £9 per annum for 40 years the remaining parishes a grant of £12 10s. per annum for 40 years.

During 1925 the Council granted a subsidy of £75 for each of 72 houses erected and completed—the distribution of these is seen in column 3 of the table on page 90.

During the year 146 houses were erected in the district, and at the end of 1925 a further 132 were in the course of erection. These figures include houses erected by the District Council and private persons—details are shown in the table on page 90.

At the end of 1925 the Council owned more cottage property in the district than any other owner and controlled no fewer than 188 houses on 31st December, 1925. Particulars of these are given in the table on page 83 and the rents charged is shown on page 87.

To assist private persons to erect houses the Council, under the Housing Act, 1923, Section 5, advanced on loan during the year the sum of £9,385. The distribution of the houses and amount advanced up to the end of 1925 is as follows :—

Parish.	Number of Houses.		Erection commenced during 1924.			Amount advanced during year.	
			1924.			1925.	
			£			£	
Buttsbury	...	3	}	8	475	...	1225
Danbury	...	1			175	...	245
Great Baddow	...	3			380	...	920
Writtle	...	1			200	...	—
Commenced during 1925.							
Boreham	...	3	}	20			875
Broomfield	...	1					280
Buttsbury	...	3					840
Danbury	...	3					1075
Great Baddow	...	9					3575
West Hanningfield		1					350
Totals		28			1230		9385
£10615							

Early in 1926 these houses were
completed and a further £1761
advanced

1761

Total ... £12376

Equals £442 per house.

In addition 24 of these are included among those in which a
subsidy of £75 per house was granted, namely £1800.

The advance on loan was on the following percentages of the
Council's valuation :—80%, 13 ; 75%, 9 ; 70%, 6. Total, 28.

The following are the particulars of the houses erected and controlled by the District Council at the end of 1925.

PARISH.	ERECTED UNDER			Totals.
	The Housing Act, 1890.	The State-aided Scheme, charges being a general rate limited to 1d. rate.	The Housing (Financial Provisions) Act, 1924, grant of £12 10s. per year given by the Treasury for 40 years in agricultural parishes and £9 in other parishes.	
Boreham	4	4
Broomfield
Buttsbury
Chignall	2	2
Danbury ...	6	25	...	31
East Hanningfield	4	4
Good Easter	6	...	6
Great Baddow	63 ⁽¹⁾	...	63
Great Leighs
Great Waltham	2 ⁽²⁾	2
Ingatestone and Fryerning ...	2 ⁽³⁾	30	...	32
Little Baddow ...	6	...	...	6
Little Leighs
Little Waltham	4	4
Margaretting	6	...	6
Mashbury
Pleshey
Rettendon
Roxwell
Runwell
Sandon ...	4	4	...	8
Sth. Hanningfield
Springfield
Stock
West Hanningfield
Widford
Woodham Ferris	4	...	4
Writtle	16	...	16
Totals ...	18	154	16	188

(1) Of these 12 are in Galleywood. (2) These are at Ford End.

(3) These completed in 1911 were not erected under the Housing Act, 1890, but under Ingatestone Water Works Loan and is a special rate on the parish. All the other houses are charged as general expenses.

TABLE SHOWING PARTICULARS OF HOUSES APPROVED BY THE
MINISTRY OF HEALTH UNDER THE HOUSING (FINANCIAL PROVISIONS)
ACT, 1924.

Parish.	Approval of Ministry of Health.				Remarks.
	1924-25.		1926.		
	No. of Houses.	Date of Sanction.	No. of Houses.	Date of Sanction.	
Great Baddow :					Of the 122 sanctioned during 1924-25 by 30th June, 1926, 90 had been erected or contracts signed; the remaining 32 were distributed as follows.—
Village ...	16	8th May, 1925	—	—	
Galleywood ...	4	„ „	—	—	
Little Baddow ...	4	„ „	—	—	
	4	26th Nov., 1924	—	—	
Boreham ...	4	8th May, 1925	—	—	Ingatestone & Fryerning ... 14
	8	24th Dec., 1925	—	—	Roxwell ... 12
					Stock ... 6
Broomfield ...	—	—	20	13th May, 1926	Total ... 32
Chignal St. James ...	4	26th Nov., 1924	—	—	
Chignal Smealey ...	4	8th May, 1925	—	—	Of the 74 sanctioned during 1926 by 30th June, 1926, 48 had been erected or was in the course of erection; the remaining 26 was distributed as follows:—
East Hanningfield ...	4	26th Nov., 1924	—	—	
West Hanningfield ...	—	—	4	20th Jan., 1926	
Ingatestone & Fryerning	20	8th May, 1925	—	—	
Great Leighs ...	4	26th Nov., 1924	2	20th Jan., 1926	Broomfield ... 20
Little Leighs ...	4	8th May, 1925	2	„ „	Highwood ... 6
					Total ... 26
Rettendon ...	4	„ „	—	—	
Roxwell ...	4	26th Nov., 1924	8	23rd Mar., 1926	Thus, of the 196 houses sanctioned up to 30th June, 1926, no fewer than 138 were completed or contracts entered into for their erection.
Stock ...	6	8th May, 1925	—	—	
Great Waltham :					
Ford End ...	4	26th Nov., 1924	—	—	
	2	„ „	—	—	
Barrack Lane ...	4	8th May, 1925	8	20th Jan., 1926	
Little Waltham ...	4	26th Nov., 1924	2	„ „	
Woodham Ferris ...	—	—	12	23rd Mar., 1926	
Writtle :					
Village ...	14	8th May, 1925	10	„ „	
Highwood...	—	—	+6	„ „	
	122		74		

† Sanctioned for Parish of Writtle but the Council earmarked them for Highwood area.

HOUSING (ASSISTED SCHEME) FINAL STATEMENT OF EXPENDITURE.

SUMMARY.

Situation of site.	Acre- age.	No. of houses.	Cost of sites.	Cost of building.	Cost of roads.	Total cost.
1	2	3	4	5	6	7
			£ s. d.	£ s. d.	£ s. d.	£ s. d.
Great Baddow...	14.925	51	2049 18 0	50468 12 3	1379 12 0	53898 2 3
Galleywood ...	2.0	12	226 19 6	12257 18 9	—	12484 18 3
Little Baddow...	2.506	—	107 9 5	—	—	107 9 5
Boreham ... (Nurseries)	3.0	—	259 14 4	149 5 2	—	408 19 6
„ (Village)	6.874	—	519 8 9	—	—	519 8 9
Broomfield ...	7.95	—	878 2 0	—	—	878 2 0
Danbury ..	5.0	25	375 18 7	24539 15 5	798 1 5	25713 15 5
East Hanningfield	0.5	—	40 0 0	—	—	40 0 0
West „ ...	—	—	11 5 0	—	—	11 5 0
Good Easter ... (Village)	1.0	6	62 10 8	5130 1 7	—	5192 12 3
„ (Elbows)	1.0	—	32 14 8	—	—	32 14 8
Ingatestone ...	5.044	30	813 4 0	29253 19 8	484 9 10	30551 13 6
Margaretting ...	1.0	6	133 5 0	5534 0 7	—	5667 5 7
Rettendon ...	2.0	—	103 18 1	95 14 5	—	199 12 6
Sandon (Dealtrees)	0.5	4	53 7 11	3754 3 4	—	3807 11 3
„ Village...	0.562	—	66 10 8	—	—	66 10 8
Stock ...	2.0	—	172 8 7	—	—	172 8 7
Great Waltham (Barrack Lane)	2.5	—	129 4 7	—	—	129 4 7
Great Waltham (Ford End)	1.505	—	109 5 4	—	—	109 5 4
Little Waltham...	0.75	—	86 1 9	—	—	86 1 9
Woodham Ferris	0.608	4	65 9 2	4166 6 4	—	4231 15 9
Writtle ..	5.25	16	381 4 1	14832 0 9	317 2 7	15530 7 5
Totals ...	66.475	154	6678 0 1	150181 18 3	2979 5 10	159839 4 2

OVERCROWDING. This is mainly due to houses being occupied by more than one family and insufficient bedroom accommodation for the number in families. A large number of houses throughout the district have only two bedrooms.

FITNESS OF HOUSES. Many houses in the district are suffering from senile decay, which is specially marked in purely rural areas where the rents received by owners are so low that owners cannot afford to carry out the extensive repairs necessary to make these houses in all respects fit for human habitation. The defects usually met with are (1) dampness, often due to want of damp proof course; (2) defective light; (3) general dilapidation. The action taken by the District Council is given in the detailed statistics for the year 1925 on pages 87—89.

The tables on pages 91 and 92 give particulars of the representations made relating to unfit houses, since the Housing and Town Planning Act, 1909, came into force, the action taken, and the conditions of the houses at the end of 1925.

During the year no complaints were received, either from householders or Parish Councils relating to unfit houses. No repairs were carried out by the Local Authority and no dwelling-house was voluntarily closed under Section 28 of the Housing Act, 1919.

No action relating to obstructive buildings under Section 38 of the Housing Act, 1890, was taken.

No demolition order was made during the year. Water supply, closet accommodation and refuse disposal have already been referred to. In many parishes the District Council supply water from mains.

There are no unhealthy areas; the unfit houses can be dealt with singly.

There are no bye-laws relating to houses let in lodgings. Bye-laws for tents, vans and sheds have given rise to no administrative difficulties.

Building bye-laws were adopted in 1914.

TYPE OF HOUSES OWNED BY THE DISTRICT COUNCIL
AND RENTS CHARGED PER WEEK.

Parish.	Non-Parlour Type.		Parlour Type.	
	Number.	Rent per week.	Number.	Rent per week.
Boreham ...	4	5/6	...	...
Chignal ...	2	5/6	...	...
Danbury ...	4	5/3	2	6/9
			25	11/0 (1)
East Hanningfield ...	4	5/6		
Good Easter ...	6	6/0 (1)		
Great Baddow ...			12	11/0 (1)
				(Galley-wood).
			51	12/6 (1)
				(Village).
Great Waltham ...	2	5/6		
Icgatestone & Fryerning	2	5/6	30	11/0 (1)
Little Baddow ...	6	5/3		
Little Waltham ...	4	5/6		
Margaretting ...			6	9/0 (1)
Sandon ...	4	5/3	4	7/6 (1)
Woodham Ferris ...			4	8/0 (1)
Writtle ...			16	11/6 (1)
Totals ...	38		150	

(1) These erected under the assisted scheme—rents are exclusive of rates and in all the others the rates are included.

HOUSING STATISTICS FOR THE YEAR 1925.

Number of new houses erected during the year :—

(a) Total (including number given separately under (b)) 146

(b) With State assistance under the Housing Acts :

(i) By the Local Authority 16

(ii) By other bodies or persons 72

These are set out in detail in the table on page 90.

1. Unfit dwelling-houses:—

Inspections—(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts 225

(2) Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910 102

(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation 6

(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation ... 22

2. Remedy of defects without service of formal notices:—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers 160

3. Action under Statutory powers ... 6 notices

A. —PROCEEDINGS UNDER SECTION 28 OF THE HOUSING, TOWN PLANNING ACT, 1919.

(1) Number of dwelling-houses in respect of which notices were served requiring repairs Nil.

(2) Number of dwelling-houses which were rendered fit after service of formal notices:—

By owners Nil.

By Local Authority in default of owners ... Nil.

(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close... Nil.

B.—PROCEEDINGS UNDER THE PUBLIC HEALTH ACTS.

(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied ... 166

(2) Number of dwelling houses in which defects were remedied after service of formal notices :—

By owners ... 6

By Local Authority in default of owner .. Nil.

C.—PROCEEDINGS UNDER SECTIONS 17 AND 18 OF THE HOUSING, AND TOWN PLANNING, ETC., ACT, 1909, AND THE HOUSING ACT, 1925.

(1) Number of representations made with a view to the making of Closing Orders ... 6

(2) Number of dwelling houses in respect of which Closing Orders were made ... 5

(3) Number of dwelling houses in respect of which Closing Orders were determined, the dwelling houses having been rendered fit ... 5

(4) Number of dwelling houses in respect of which Demolition Orders were made ... Nil.

(5) Number of dwelling houses demolished in pursuance of Demolition Orders ... Nil.

TABLE SHOWING NUMBER OF HOUSES ERECTED DURING 1925
AND IN COURSE OF ERECTION AT END OF YEAR.

Parish.	NUMBER OF HOUSES							
	Erected during 1925.				In course of erection at end of 1925.			
	By District Council.	By private persons with aid of subsidy.	By private persons without subsidy.	Totals.	By District Council.	By private persons with promise of subsidy.	By private persons without subsidy.	Totals.
Boreham ...	4	2	1	7	4	..	..	4
Broomfield ...	..	1	..	1	..	..	2	2
Buttsbury ..	..	12	4	16	..	5	5	10
Chignall ...	2	..	..	2	2	..	..	2
Danbury ...	..	23	3	26	..	15	3	18
East Hanningfield ...	4	..	..	4	..	..	..	..
Good Easter ...	..	..	..	..	..	..	..	..
Great Baddow ...	..	16 ⁽¹⁾	15	31	..	5	4	9
Great Leighs ...	..	..	1	1	4	..	..	4
Great Waltham ...	2 ⁽²⁾	1	3	6	8 ⁽³⁾	1	..	9
Ingatestone & Fryerning ...	..	..	6	6	..	2	..	2
Little Baddow ...	..	..	1	1	4	1	3	8
Little Leighs ...	..	..	..	..	4	..	..	4
Little Waltham ...	4	..	1	5	..	4	..	4
Margaretting ..	..	..	1	1	..	..	..	..
Mashbury ...	..	..	..	..	..	..	..	..
Pleshey ...	..	..	..	..	..	..	..	..
Rettendon ...	..	..	2	2	4	..	..	4
Roxwell ...	..	..	..	..	..	1	..	1
Runwell ...	..	2	3	5	..	..	..	..
Sandon ...	..	..	..	..	..	..	..	..
South Hanningfield ...	..	..	..	..	..	..	..	..
Springfield ...	..	1	1	2	..	..	..	..
Stock ...	..	3	1	4	..	1	1	2
West Hanningfield ...	..	4	1	5	..	..	..	..
Widford ...	..	..	..	..	..	..	..	..
Woodham Ferris ...	..	..	9	9	..	2	11	13
Writtle ...	..	7	5	12	..	7	2	9
Totals ...	16	72	58	146	30	44	31	105

(1) Of these, 1 was in Galleywood.

(2) These were in Ford End.

(3) Of these, 2 were in Ford End.

TABLE SHOWING REPRESENTATIONS AND CLOSING ORDERS MADE
SINCE THE HOUSING AND TOWN PLANNING ACT, 1909, CAME
INTO FORCE.

Year.	Parish.	Owner.	Representation.	Closing order made.	Occupier.	Condition at end of 1925.
1910	Roxwell ...	Shaw ...	1	...	Hatcher	Derelict
1911	Little Baddow ...	Pluck ...	1	...	Martin	Rebuilt
1911	Great Leighs ...	Blyth ...	1	1	Monk	Repaired
1911	Writtle ...	Jones ...	1	1	Adams	Repaired
1911	Great Waltham ...	Radcliffe	4	...	Clark and three others	Repaired
1912	Great Waltham ...	Darby & Co.	2	2	Harrington and another	Repaired
1912	Writtle ...	Clift ...	1	...	Gaff	Repaired
1912	Writtle ...	Rust ...	1	...	Sutton	Repaired
1912	West Hanningfield ..	Kemble	1	...	Williams	Demolished
1912	East Hanningfield ...	Burrells ...	2	...	Hill and another	Repaired
1913	Radley Green ...	Marriage ...	4	...	Ransin and three others	Repaired
1914	Runwell... ..	Rainsford	1	1	Archer	Repaired
1914	Stock ..	Mathews ...	2	2	Tyack	Demolished
1914	Ingatestone ...	Poston ...	9	9	Hill and eight others	Demolished
1914	Retendon ...	Wells ...	4	4	Cornell and three others	Derelict
1914	Writtle ...	Staines ..	1	...	Malyon	Demolished
1914	Retendon ...	Daniels ...	1	1	Little	Derelict
1915	Little Baddow ..	Bushell ...	1	1	White	Demolished
1915	Woodham Ferris ...	Joselyn ...	5	5	Empty	Demolished
1916	Nil.	—	—	—	—	—
1917	Great Waltham ...	Smith ...	1	1	Bush	Demolished
1918	Nil.	—	—	—	—	—
1919	East Hanningfield ...	Enkle ...	1	1	Saville	Empty
1919	Great Baddow ...	Moul ...	1	1	Moul	Demolished
1919	Great Baddow ...	Moul ...	1	1	Moul	Demolished
1919	Buttsbury ...	Perrin ...	1	1	Perrin	Occupied
1919	Little Baddow ...	Livermore	1	1	Enever	Occupied
1921	Writtle ...	Flack ...	1	1	Bayford	Repaired
1921	Writtle ...	Darby ...	1	1	Howlett	Repaired
1921	Writtle ...	Darby ...	1	1	Cook	Converted into Office
1921	Writtle ...	Stewart ...	3	3	Beard Southgate Wood	Occupied
1921	West Hanningfield ..	Howell ...	1	1	Keen	Derelict
1921	Springfield ...	Darby ...	1	1	Empty	Derelict
1921	Boreham ...	Page ...	1	1	Windley	Repaired
1922	Great Baddow ...	Jackson ...	1	1	Empty	Empty
1922	Great Baddow ...	Keene ...	1	1	Moore	Demolished
1922	Great Baddow (Galleywood)	Keene ...	1	1	Lanzer	Repaired
1922	Great Baddow ...	Poole ...	1	1	Smith	Repaired
1922	Bicknacre ...	Macdougall	1	1	Rushbrook Savage	Empty
1922	Ingatestone ...	Greenfield	4	4	Crawley Skingley Minnett	Occupied
1922	Ingatestone ...	Neave ...	1	1	Morgan	Occupied
1922	Ingatestone ...	Neave ...	1	1	Macdonald	Empty

Year.	Parish.	Owner.	Representation.	Closing order made.	Occupier.	Condition at end of 1925.
1922	Widford ..	Darby ...	4	4	French Pitt Blundell Brazier	1 empty 3 occupied
1922	Woodham Ferris ...	Hicks ...	1	1	Hicks	Derelict
1922	Writtle ...	Wallace ...	1	1	Howlett	Repaired
1922	Writtle ...	Lowe ...	1	1	Horsnell	Now an office
1922	Writtle ...	Dennison...	1	1	Rolph	Repaired
1922	Writtle ...	Dennison...	1	1	Beard	Repaired
1922	Stock ...	Wilson ...	1	1	Empty	Demolished
1922	Stock ...	Calloway..	1	1	Empty	Used as a store
1923	Rettendon ...	Daniels ...	1	1	Empty	Demolished
1923	Great Baddow ...	Hodge ...	1	1	Burrells	Repaired
1923	Great Baddow ...	Hodge ...	1	1	Cass	Repaired
1923	Great Baddow (Galleywood)	Tubb ...	1	1	Shelley	Occupied
1923	East Hanningfield ...	Rayner .	1	1	Wood	Demolished
1923	East Hanningfield ...	Rayner ...	1	1	Butt	Demolished
1923	East Hanningfield ...	Rayner ...	1	1	Monduel	Demolished
1923	Ingatestone ...	Camp ...	1	1	Webb	Demolished
1923	Ingatestone ...	Camp ...	1	1	Pinnock	Demolished
1923	Rettendon ...	Shelley ..	1	1	Davidson	Repaired and converted
1923	Rettendon ...	Shelley ...	1	1	Noakes	into 1 house
1923	Great Waltham ...	Bush ...	1	1	Hornsby	Repaired
1923	Writtle ...	Stewart ...	1	1	Flack	Occupied
1924	Boreham ...	Fuller ...	1	1	Cracknell	Occupied
1924	Rettendon ...	Althoff ...	1	1	Appleton	Demolished
1924	Rettendon ...	Althoff ...	1	1	Hudson	Demolished
1924	Great Baddow ...	Hodge ...	1	1	Clarke	Repaired
1924	Great Baddow ..	Hodge ...	1	1	Cass	Repaired
1924	Great Baddow ...	Hodge ...	1	1	Burrell	Repaired
1925	Runwell... ..	Wheate ...	1	1	Wilkie	Empty
1925	Buttsbury .	Hendry ...	1	1	Childs	Occupied
1925	Buttsbury ...	Hendry ...	1	1	Chapman	Occupied
1925	Great Waltham ...	Dannatt ...	1	Not made	Turner	Occupied
1925	Great Waltham ...	Matthams	1	1	Hawkes	Occupied
1925	Great Waltham ...	Matthams	1	1	King	Occupied

TOWN PLANNING.

On 3rd March, 1925, the District Council passed the following resolution :—

"Town Planning Scheme No. 1. Parish of Runwell.
That the Council, in pursuance of Section 42 of the Housing, Town Planning, &c., Act, 1919, hereby decide to prepare the above Town Planning Scheme with reference to an area situated wholly within the Rural District of Chelmsford, namely, the whole of the civil parish of Runwell, and enclosed within the inner edge of a blue border on a map now produced to the Council and marked and certified by James Dewhirst, the Council's Engineer and Surveyor, under his hand, and dated the twenty-fifth day of February, 1925, as Map No. 1"

At the same time it was decided to make the expenses special expenses on Runwell Parish, which was approved by the Ministry of Health, but this has been since amended with the sanction of the Ministry to be general expenses (as the Council decided to proceed to town plan other areas).

Early in 1926 (2nd March, 1926) the Council decided to town plan the following parishes :—Great Baddow, Little Baddow, Boreham, Broomfield, Buttsbury, Chignall, Danbury, Margaretting, Sandon, Springfield, Stock, Widford and Writtle, known as Scheme No. 2 (central area). The Council appointed Mr. P. J. Bowling, of South Bentlee, Essex, their Town Planning Surveyor.

INSPECTION AND SUPERVISION OF FOOD.

The responsibility for a pure and wholesome food supply is a heavy one, it being most essential that nothing but sound food should be retailed. The health of the people demands this and the Local Authority should insist on it. It is greatly regretted that there is not more time for this important work, but as much of this inspection as is possible is carried out.

(a) MILK SUPPLY.

- (i) *Tuberculous Milk and Tuberculous Cattle.* The District Council employed a Veterinary Surgeon to undertake inspection of all the dairy herds in the district—his report is found on pages 121—126.
- (ii) *Graded Milk.* One supplementary licence to sell Grade A milk from premises other than those at which the milk was produced, was granted. One “dealer’s” licence was also granted.
- (iii) Two retailers were refused registration, these are referred to in the General Remarks.
- (iv) A summarised table of the bacteriological examination of samples of milk taken by the Veterinary Surgeon is given in his report on page 126.

Dairies, Cowsheds and Milkshops.

Work has been maintained in this direction during the year with a view to all premises being brought up to a reasonably good standard and the results on the whole have been pleasing. At the end of the year registration was being withheld in respect of eight dairy farm premises (pending these being improved to the desired standard) compared with 36 at the end of 1924.

Every credit is due to the enterprising farmer who is anxious and willing to have clean and sanitary premises and he finds that it pays to have these. The general standard of cowsheds and the

methods used therein are good. A number of improvements have been carried out without the necessity of notices being served, such as the installation of drinking troughs in a number of sheds, etc. I consider the rendering of the walls of the cowshed in cement to a distance of three to four feet from the floor to be a very useful improvement and in all cases where this has been recommended it has been adopted. One farmer wrote thanking your Inspector for recommending this to be done in his cowshed and expressed his surprise at the amount of accumulated filth between the boarding and the wall when the former was removed to enable the space to be filled in with cement. He was so satisfied with the results that he intends to adopt similar methods in his pig styes and stables.

Nineteen Informal Notices and 11 Statutory Notices were served in respect of dairy farms. Two retailers were summoned to appear before the Council under the Milk and Dairies (Amendment) Act 1922, to show cause why the Council should not remove them from the register on account of dirty premises, etc. These purveyors undertook to improve their premises and methods forthwith and the standard has considerably improved in each case. Another retailer was summoned to appear before the Council for retailing milk without being registered and on account of very unsatisfactory premises and methods. He was informed that he must either stop retailing or provide suitable premises. He ceased to sell milk. Registration was refused to a further retailer on account of dirty and highly unsatisfactory methods and premises. A sample of milk was taken here which was found to contain an excessive amount of dirt and bacteria. The cleanliness of some retail purveyors leaves much to be desired although on the whole, it is fairly satisfactory. Some of the floats and churns could be improved in this respect, but the quickest remedy is with the public who should make their purchases from the purveyor whose utensils and habits are clean. The loss of a few customers would make the dealer think seriously as to the cause.

The grooming of cows is most important and it is pleasant to report that grooming is on the increase. A clean milk supply is essential and this cannot be obtained unless every care is used ; the udders should be kept clean, a hooded milking pail used, the milkers should be clean and the premises clean and sanitary. Efforts have been made to cause the manure to be removed to a reasonable distance from the cowsheds and dairies, but there is still room for improvement in this respect. Some of the dairy farm premises have been built on totally unsuitable sites where cleanliness is difficult.

The following table shows the improvements carried out during the year on dairy farm premises as a result of requests from your Sanitary Inspectors.

Dairies provided	...	...	9
Dairies repaired or improved	...	..	5
Communication between cowshed (or scullery) and dairy sealed	...		2
Floor of cowshed repaired or relaid	...		8
Drainage to cowshed or dairy improved	...		8
Cesspools provided	...	...	7
Lighting improved (cowsheds)	...	...	4
Cowsheds improved (other forms)	...		2
Approach to cowsheds improved...	...		9

The table on page 97 shows the number of premises in respect of which application for registration has been made since the passing of the Milk and Dairies (Amendment) Act 1922, and trading during the year 1925.

(a) MEAT INSPECTION.

288 inspections were made at slaughterhouses, compared with 46 in the previous year. This work, as will be gathered, is very important and consumes a good deal of your Meat Inspector's

PREMISES IN RESPECT OF WHICH APPLICATION FOR REGISTRATION HAS BEEN MADE SINCE
THE PASSING OF THE MILK AND DAIRIES (AMENDMENT) ACT, 1922, AND TRADING DURING
THE YEAR 1925.

Parish	Cowkeepers' Premises						Retail Purveyors of Milk who are not Cowkeepers		Totals
	Wholesale Purveyors of Milk		Wholesale & Retail Purveyors of Milk		Retail Purveyors of Milk				
	Registered	Registration issued at end of year	Registered	Registration issued at end of year	Registered	Registration issued at end of year			
Great Badlow	13	—	1	—	1	—	2	—	18
Little Badlow	2	—	—	—	—	—	—	—	2
Boreham	6	—	1	—	—	—	—	—	8
Broomfield	3	—	—	—	2	—	—	—	5
Buttsbury	4	—	—	—	—	—	—	—	4
Chignal	2	—	—	—	—	—	—	—	2
Danbury	4	—	—	—	4	—	—	—	8
Great Leighs	—	—	—	—	1	—	—	—	1
Little Leighs	1	—	—	—	—	—	—	—	1
Margaretting	6	—	—	—	—	—	—	—	6
Ingatesstone	—	2	1	—	4	—	1	—	14
East Hanningfield	15	—	—	—	1	—	—	—	16
West Hanningfield	8	1	—	—	1	—	—	—	10
South Hanningfield	2	—	—	—	—	—	—	—	2
Retendon and Runwell	9	1	4	—	3	—	1	—	18
Roxwell	3	1	—	—	1	—	—	—	5
Sandon	7	—	1	—	—	—	—	—	8
Springfield	2	—	—	—	1	—	—	—	3
Steele	5	—	1	—	1	—	—	—	7
Great Waltham	1	—	—	—	1	—	—	—	2
Little Waltham	—	—	1	—	—	—	—	—	1
Widford	2	—	—	—	—	—	—	—	2
Woodham Ferris	16	—	1	1	2	—	—	—	20
Writtle	10	1	1	—	3	—	1	—	16
Totals	127	6	12	1	27	1	5	—	179

time, both in and out of office hours. One cannot expect the average individual to acquaint himself with the dangers attending the consumption of diseased meat and it is for the Sanitary Authority to afford him proper protection.

The class of animals slaughtered in your district is, on the whole, very good. When one considers that providing no meat inspection was carried out, and the butchers had not considered the meat diseased, it would be possible for a great amount of diseased meat to be sold to the public and only an extremely small percentage would have any suspicion that such meat was in their possession. The amount of meat condemned in 1925 was greater than during the previous year.

The new Meat Regulations (Public Health (Meat) Regulations of 1924) are a decided step to wards ensuring a sound supply of meat to the public. It is now necessary for butchers to give Mr. Ogden, your Officer appointed to administer the Regulations :—

- (a) Three hours notice of slaughtering,
- (b) To notify when any part of the carcass or organs, which on slaughtering appears to be diseased.
- (c) To refrain from removing (with certain exceptions) the carcass and internal organs from the slaughter-house until three hours have elapsed from the time of slaughtering unless these have, in the meantime, been inspected by your Meat Inspector.

Certain precautions for the protection of meat from contamination in shops, stalls, etc., and in transit are provided for in the Regulations.

It will be realised, however, that systematic inspection is impossible with the existing staff and only one qualified Meat and Food Inspector and the butchers naturally demand a qualified Meat and Food Inspector to examine their meat.

The following table shows the number and distribution of slaughterhouses in occupation in 1920. In January, 1925, and at the end of 1925 a brief report on the condition of each one is given in the table on pages 76 and 77.

	In 1920.		In January, 1925.		In December, 1925.
Registered ...	12	...	8	...	8
Licensed—					
(a) *Permanent	3†	...	5†	...	4†
(b) *Annual ...	—	...	2	...	5
Total ...	15		15	...	17

*See note *re* these types of licence on page 77.

†Includes one knacker's yard licence.

The following premises ceased to be used as slaughterhouses during the year. In the former case the licence was a "permanent" one (see note at foot of table on page 77) so that in the event of application being made to again use the premises as a slaughterhouse, they would rank under the "annual" licence conditions, owing to the fact that they have not been in continuous use since the date upon which the first licence was granted.

Parish.	Occupier.	Remarks.
Little Baddow ...	J. C. Spencer-Phillips ...	Ceased May, 1925
Stock ...	H. Wright ...	... Originally a registered slaughterhouse but owing to a period of disuse these premises are classified under the "Annual" licences. In April 1925 the Council was notified that the premises had been converted from a slaughterhouse to a cold store.

Proper supervision and control of the meat supply in the district can only be made possible by the provision of a public slaughterhouse.

There is one knacker's yard in the district (Great Baddow), the licence was granted in 1919.

SURRENDER OF DISEASED MEAT.

With a single exception the whole of the meat condemned was actually surrendered by the various owners without dispute. In this case the butcher had voluntarily surrendered a carcase as unfit for human food, but subsequently a small portion of the diseased carcase was found on the premises. The District Council decided to take proceedings and early in 1926 the butcher was convicted and fined £5 and £15 costs.

(c) OTHER FOODS.

In February a sale of tinned goods was announced by a firm of grocers in the District and as a result of an inspection of these goods, the following were condemned as being unsound and unfit for the food of man. They were surrendered by the owners.

- 7 tins of tomatoes.
- 6 „ cherries.
- 3 „ pears.
- 15 seven pound tins of apricot pulp.
- 28 tins of haddocks.
- 1 tin of crab.
- 1 „ sardines.
- 2 tins of salmon.

(d) BAKEHOUSES (29).

The general methods of distribution of bread leave much to be desired. However clean a bakehouse may be and however clean the methods, there is, in many cases, danger of contamination between the bakehouse and the consumer. The wrapping of bread would be a good step towards a cleaner supply. Much handling must necessarily take place by the delivery-van driver and however careful he may be, his hands are not always clean. It is the custom of many deliverers to bring a few loaves in a basket from the van to the housewife who takes out the particular kind she requires, the others being returned to the van. One frequently sees loaves left on doorsteps where the housewife

happens to be out. I feel that the public would readily purchase wrapped bread in preference to that which is unwrapped and so very liable to contamination.

The following table shows the number of bakehouses in occupation at the end of the year:—

Parish.		Occupier.
Great Baddow	...	Carter, H. & Sons
"	...	Cottee, C. J.
"	...	Borton, G. A.
Broomfield	...	Franklin, F.
"	...	Parsons, G. J.
Boreham	...	Church, A. W.
Danbury	...	Curtiss, Misses
"	...	Dickerson, W. T.
"	...	Roast, E.
"	...	Smith, H.
Good Easter	...	Coates, C. C.
Great Leighs	...	Port, A. G.
Margaretting	...	Bartrop, C.
"	...	Sawyers, E.
Ingatestone	...	Holmes, F.
"	...	Raven, S. A.
Rettendon	...	Benson, H. & E.
"	...	Mann, A. G.
Roxwell...	...	Molyneux, H. C.
Stock ...	...	Cottee, A. C.
Pleshey ...	...	May, J.
Great Waltham	..	Biggs, E.
"	...	Brown, H. E.
Little Waltham	...	Hicks, F. G.
Woodham Ferrers	...	Johnson, C. J.
"	...	Pettit, P.
Writtle ...	...	Hance, E. E.
" ...	...	Lodge, E. W.
" ...	..	Warner, E. & J.

PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASES.

INFECTIOUS DISEASES GENERALLY.

During the five years ended December, 1925, the number of notifiable infectious diseases coming under observation was not excessive, the number of Scarlet Fever and Diphtheria cases being as follows :—

			Scarlet Fever.	Diphtheria.
1921	...	...	34	16
1922	...	...	29	10
1923	...	...	34	2
1924	...	...	30	28
1925	...	...	17	11
			—	—
			144	67
			—	—

Making an average of 29 cases of Scarlet Fever and 13 cases of Diphtheria per annum.

These figures are so small that beyond hospital treatment and ordinary precaution and isolation, no special procedure or recently developed artificial methods of immunization have been used against these diseases.

There had been no special factor in the spread of diseases. The small epidemics which have occurred have been caused through disease being spread by mild unrecognized cases. One epidemic of Diphtheria in 1924 (comprising 17 cases) was rather unusual, being caused by three people who had sore throats, and later gave positive swabs, attending a social tea. Several children were infected in this way, and the illness spread before the cause was discovered.

Supplies of Diphtheria antitoxin are always available at the Isolation Hospital. The District Council pays for antitoxin if the patient is not in a position to do so.

Very few cases of Influenzal Pneumonia have been notified. A form of gastric influenza was prevalent throughout the country at the beginning of 1923, during that year 11 deaths were registered in the district as due to Influenza and 11 to Pneumonia (all forms).

One case of Malaria was notified in 1921. The disease had originally been contracted abroad. No case of Dysentery or Trench Fever has been notified in the district since the Regulations came into force.

Six cases of Encephalitis Lethargica have come under observation during the last five years. One of these received hospital treatment and recovered. Of the remaining five, four recovered. The fatal case was an infant, aged five months.

No case of Small-pox has been notified during the last five years. A few contacts came into the district at intervals. These were kept under observation until the incubation period had expired. No vaccinations have been performed by the Medical Officer of Health under the Public Health (Prevention of Small-pox) Regulations, 1917.

Limited epidemics of Measles, Whooping Cough, Mumps and Chicken-pox have occurred throughout the district from time to time; 11 deaths from Whooping Cough have been registered since 1920, but during the same period no deaths were attributed to Measles.

The examination of bacteriological and pathological specimens is undertaken by the County Council. During 1925, 95 Diphtheria swabs, 6 samples of blood for Widal's re-action, and 43 samples of sputum for Tubercle Bacilli were examined for this district.

DISINFECTION. At the Isolation Hospital there is a steam disinfecter where all disinfection of clothing, bedding, &c., is carried out. The Sanitary Inspector's Department carries out disinfection of premises after the removal, recovery or death of a patient suffering from infectious disease.

NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS) DURING 1925.

There were 39 cases of infectious disease (exclusive of Tuberculosis) notified during the year as compared with 64 for 1924. Of these, 17 cases were Scarlet Fever and 11 of Diphtheria.

There was no prevalence of any disease in any particular parish. The nine cases of Diphtheria in Great Baddow were spread fairly evenly over the whole year.

Two cases of Paratyphoid Fever and one of Typhoid were notified during the year. No source of infection could be traced with regard to the two former cases.

With regard to the latter case, the parents of the child attributed the infection to the child having drunk water from a spring on the roadside while playing nearby. This spring was the chief source of supply to a dipping well, which was the sole water supply of a row of cottages.

Alterations have been carried out to protect the well from surface water contamination at the expense of the District Council.

A recent sample taken showed an improvement in the quality of the water.

The table on page 108 classifies the notifiable infectious diseases according to age, &c., and that on page 107 according to local distribution.

The table on page 110 shows the number of infectious diseases and number of deaths caused by these year by year since 1901.

The number of cases admitted year by year into the Hospitals controlled by the Chelmsford Joint Hospital Board since the year 1907 is shown in the table facing page 110.

If this table is consulted it is seen that a large proportion of the cases admitted were suffering from Diphtheria or Scarlet Fever. Within recent years it has been demonstrated that it is possible by a test to tell whether a person is immune to the infection of Diphtheria or Scarlet Fever. The test for Diph-

theria is known as the Schick, that for Scarlet Fever as the Dick test. Moreover, it has since been demonstrated that a susceptible person to either of these diseases can be made immune by artificial methods. In your area neither test or immunization has been carried out for these diseases. If immunization of the children in the district was possible then the heavy expenditure incurred through the isolation of cases of Diphtheria and Scarlet Fever would be considerably reduced.

Return to normal health of patients suffering from Scarlet Fever is hastened by hospital treatment. This is not altogether due to the better nursing facilities but partly to the open air exercises the patient is able to indulge in during the convalescent stage of the illness.

Within recent years grave doubts have been expressed as to the value of Isolation Hospitals in preventing the spread of Scarlet Fever. A few years ago I collected some figures bearing on this point which I produce here.

The following table shows the number of households from which a case of Scarlet Fever was notified, the number treated in Hospital, the number treated at Home, and the subsequent cases occurring in these households—the households are classified according to accommodation :—

No. of Rooms in house.	Where Primary Cases were removed to Hospital.		Where Primary Cases were isolated at Home.		Percentage of House- holds in which second cases occurred when the Primary Case was Isolated at	
	No. of House- holds	No. in which a second case occurred.	No. of House- holds.	No. in which a second case occurred.	Hospital.	Home.
2	56	7	22	5	12·5	22·7
3	33	3	17	4	9·0	23·5
4	70	7	49	8	10·0	16·3
5 and over	35	4	30	14	11·4	46·6
Totals...	194	21	118	31	10·8	26·2

As the number of persons in the household not known to have had an attack of Scarlet Fever was a better indication, the following table is made out on that basis.

No. of Rooms in house.	Where Primary Cases were removed to Hospital.		Where Primary Cases were isolated at Home.		Percentage of assum- ed susceptible persons who contracted the disease when the Primary Case was Isolated at	
	No. of suscept- ible per- sons in households	No. of Secondary Cases.	No. of suscept- ible per- sons in households	No. of Secondary Cases.	Hospital.	Home.
2	182	8	62	6	4.4	9.6
3	135	4	69	9	2.9	13.0
4	299	9	186	10	3.0	5.3
5 and over	177	11	129	27	6.2	21.7
Totals...	793	32	446	52	4.0	11.6

As the adult population is known not to be very susceptible to Scarlet Fever the following table has been prepared in which susceptible persons are taken as children under 14 years who had not previously suffered from an attack of Scarlet Fever.

No. of rooms in hou-e.	When Primary Cases were removed to Hospital.		When Primary Cases were isolated at Home.		Percentage of assumed suscep- tibles under 14 years who con- tracted the disease when the Primary Case was isolated at	
	No. of suscep- tible per sons under 14 years in households	No. of Secondary Cases under 14 years.	No. of suscep- tible per- sons under 14 years in households	No. of Secondary Cases under 14 years.	Hospital.	Home.
2	70	8	19	6	11.4	31.5
3	65	4	20	9	6.1	45.0
4	130	9	56	10	6.9	17.8
5 and over.	71	11	44	27	15.4	61.3
Totals...	336	32	139	52	9.5	37.4

The Housing accommodation was slightly in favour of those segregated at Home.

These figures are not numerous enough to base a definite opinion on, but as far as they go they appear to show that the isolation of Scarlet Fever cases in Isolation Hospitals does play a part in the prevention of the disease.

TABLE SHOWING LOCAL DISTRIBUTION OF CASES
NOTIFIED DURING 1925.

PARISH.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Encephalitis Lethargica.	Erysipelas.	Pneumonia.	Puerperal Fever.	Pulmonary Tuberculosis.	Other forms Tuberculosis.	Total.
Boreham ..	...	...	...	...	...	...	...	2	1	1
Broomfield ..	6	...	...	...	...	...	...	...	...	8
Buttsbury ..	1	...	...	...	2	...	...	1	...	4
Chignall ..	1	...	...	...	...	...	...	...	...	1
Danbury ..	...	...	...	...	...	...	...	3	...	3
East Hanningfield ..	...	...	...	...	...	...	...	...	...	...
Good Easter ..	...	...	...	...	...	...	...	...	...	...
Great Baddow ..	2	9	1	...	...	1	1	...	5	19
Great Leighs ..	...	...	...	...	...	...	...	2	...	2
Great Waltham ..	1	...	...	...	...	1	...	...	...	2
Ingatestone & Fryerning ..	1	...	1	...	...	...	...	1	1	4
Little Baddow ..	...	...	1	...	...	...	...	...	...	1
Little Leighs ..	...	...	...	...	...	...	...	...	...	...
Little Waltham ..	1	2	...	...	...	...	...	2	...	5
Margaretting ..	...	...	...	...	...	...	...	...	...	...
Mashbury ..	...	...	...	...	...	...	...	1	...	1
Pleshey ..	...	...	...	...	...	...	...	2	1	3
Rettendon ..	3	...	...	1	1	...	...	1	...	6
Roxwell ..	...	...	...	...	...	...	...	1	...	1
Sandon ..	...	...	...	...	...	...	...	1	...	1
South Hanningfield ..	...	...	...	...	...	...	...	...	...	...
Springfield ..	...	...	...	...	...	...	...	...	...	...
Stock ..	...	...	...	...	...	...	...	...	2	2
West Hanningfield ..	...	...	...	...	...	...	...	...	...	...
Widford ..	...	...	...	...	...	...	...	1	...	1
Woodham Ferris ..	...	...	...	1	...	...	...	2	1	4
Writtle ..	1	...	...	...	...	...	...	1	...	2
Grand Totals ..	17	11	3	2	3	2	1	21	11	71

NOTIFIABLE DISEASES DURING THE YEAR.

Notifiable Disease.	Total cases.	Under 1	1-5	5-10	10-15	15-20	20-35	35-45	45-65	Cases admitted to hospital	Total Deaths
Diphtheria	11	—	2	5	1	2	—	—	1	11	1
Scarlet Fever	17	—	—	8	3	2	4	—	—	16	—
Enteric Fever (including Paratyphoid)	3	—	—	1	—	—	2	—	—	3	—
Encephalitis Lethargica	2	—	—	—	—	1	1	—	—	—	—
Pneumonia	2	—	—	—	1	—	—	—	1	—	—
Erysipelas	3	—	—	—	—	—	1	—	2	—	—
Puerperal Fever	1	—	—	—	—	—	1	—	—	—	—
Totals	39	—	2	14	5	5	9	—	4	30	1

TUBERCULOSIS.

During the year 22 deaths were registered as due to Tuberculosis (19 pulmonary, 3 non-pulmonary). Of these, 18 had been notified in the district under the Tuberculosis Regulations.

Investigations were made with regard to the un-notified cases with the following results :—

PULMONARY:— One had only moved into the district a short time before his death and had been notified in another area. One died outside the District and investigations were not practicable.

OTHER FORMS:—In one the diagnosis was doubtful and one was not seen by the medical attendant till the date of death, when notification would serve no useful purpose.

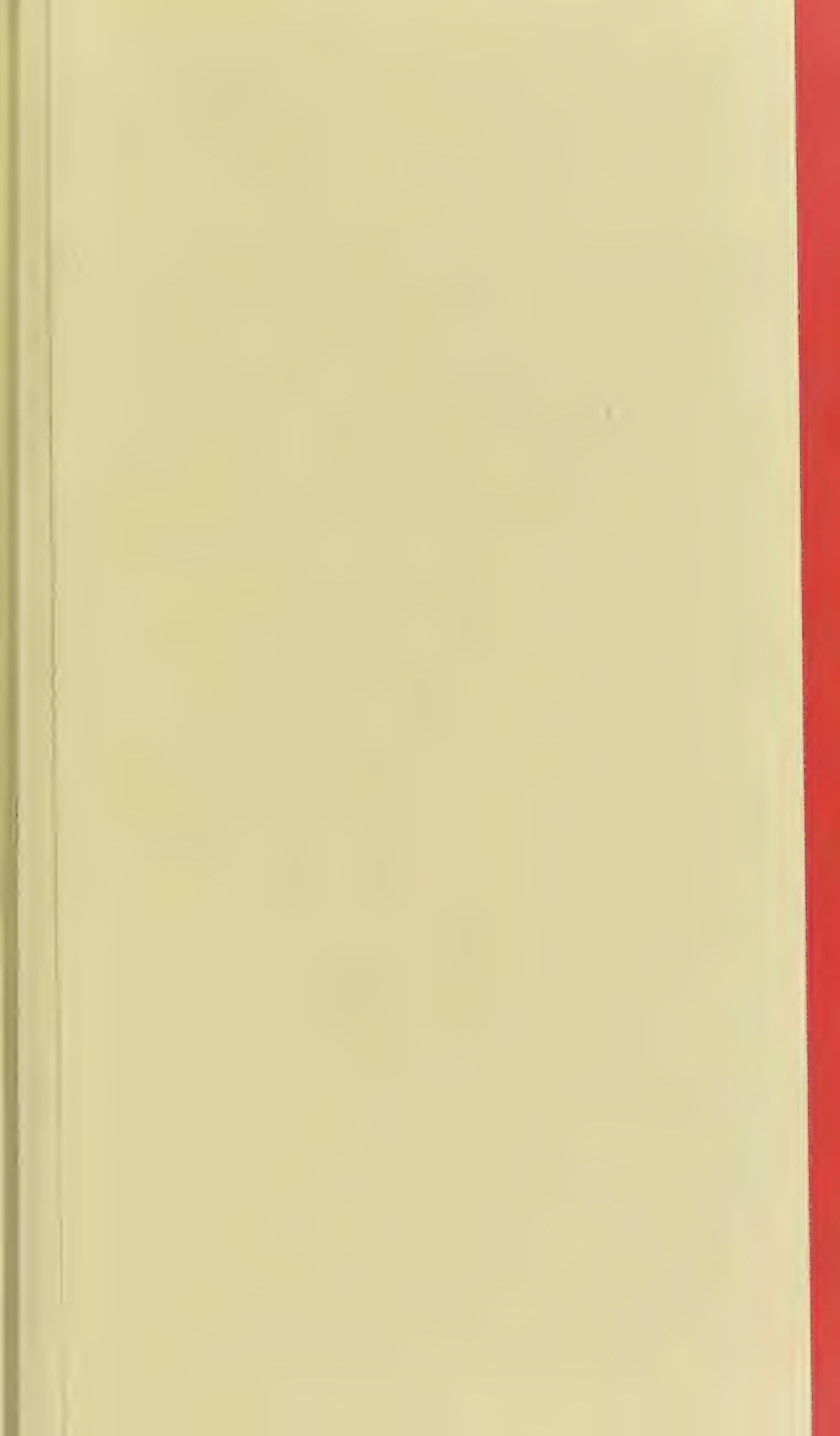
The following table gives particulars of new cases of Tuberculosis and deaths from the disease in the area during 1925 :—

Age Periods.	New Cases.				Deaths.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1	...	...	...	...	...	...	...	...
1 to 5	...	...	1	3	...	...	1	2
5 " 10	...	...	1	...	...	...	...	...
10 " 15	2	1	1	...	...	...	...	...
15 " 20	2	2	...	1	3	1	...	...
20 " 25	...	2	1	...	4	1	...	...
25 " 35	4	4	1	...	2	2	...	...
35 " 45	...	3	...	...	2	2	...	...
45 " 55	1	...	...	1	...	...	...	...
55 " 65	...	...	...	1	...	1	...	...
65 and upwards	...	...	...	...	1	...	...	...
TOTAL.	9	12	5	6	12	7	1	2

THE FOLLOWING TABLE COMPARES THE NUMBER OF CASES AND DEATHS FROM THE PRINCIPAL INFECTIOUS DISEASES YEAR BY YEAR SINCE 1901.

Year.	Scarlet Fever.		Diphtheria.		Enteric Fever.		Smallpox.		Measles.		Puerperal Fever.		Tuberculosis.	
	Cases.	De'ths	Cases.	Deaths.	Cases.	De'ths	Cases.	De'ths	Cases.	De'ths	Cases.	De'ths	Pulmonary.	Other forms.
1901..	43	1	180	18	9	1	..	..	3	..	..	..	19	6
1902..	85	3	114	3	14	3	..	..	1	..	..	..	25	11
1903..	40	6	43	3	3	1	1	..	1	..	..	..	24	7
1904..	48	..	9	..	5	1	..	..	2	..	..	..	17	8
1905..	91	1	14	1	3	..	..	..	1	1	..	..	22	9
1906..	71	1	29	3	5	1	..	..	1	1	..	..	16	6
1907..	79	1	31	3	5	..	..	..	2	..	..	..	20	8
1908..	44	1	6	..	1	..	..	..	4	..	..	..	19	4
1909..	36	..	7	1	..	..	..	..	..	..	..	..	21	5
1910..	90	1	24	..	1	1	..	..	..	1	..	..	15	2
1911..	24	..	49	2	2	..	..	..	2	..	..	..	32	6
1912..	41	..	23	3	2	..	..	..	..	..	..	..	15	3
1913..	17	..	3	..	1	..	..	..	4	..	..	..	9	4
1914..	67	..	14	..	3	1	..	..	..	..	..	..	13	2
1915..	50	3	25	..	1	..	..	..	4	..	..	..	16	4
1916..	42	5	9	4	3	..	..	..	..	1	1	..	21	5
1917..	24	..	11	2	3	1	..	..	1	..	..	..	18	3
1918..	15	..	7	1	1	..	..	..	..	..	..	..	24	4
1919..	8	..	32	..	1	..	..	..	1	2	..	..	11	3
1920..	28	..	11	1	1	..	..	..	..	..	..	..	14	4
1921..	34	1	16	2	1	..	..	..	..	1	2	..	11	7
1922..	29	..	10	1	1	..	..	..	..	1	1	..	11	4
1923..	34	..	2	..	4	1	..	..	..	..	..	..	8	1
1924..	30	..	28	3	1	..	..	..	..	..	..	..	21	6
1925..	17	..	11	1	3	..	..	..	..	1	..	..	18	5
										1	..	..	26	3
										1	..	..	19	8

†Measles was notifiable only for a few years.



PUBLIC HEALTH (PREVENTION OF TUBERCULOSIS) REGULATIONS, 1925.

No action was taken during the year relating to tubercular employees in the milk trade.

PUBLIC HEALTH ACT, 1925, SECTION 62.

No action was taken during the year under this Section.

MATERNITY AND CHILD WELFARE.

The Committee for the administration of the scheme consists of seven members, three of whom are ladies.

The scheme includes the appointment of a Health Visitor who visits all infants and children under five years of age, and gives advice, when required, to expectant mothers.

There were eight infant clinics in the district at the end of 1925, as follows :—

Galleywood which meets on the second Tuesday in the month.			
Great Waltham which meets on the third	„	„	„
Ingatstone which meets on the fourth	„	„	„
*Great Leighs which meets on the second Wednesday	„	„	„
Broomfield which meets on the first Thursday	„	„	„
Writtle which meets on the second	„	„	„
Fryerning which meets on the third	„	„	„
Great Baddow which meets on the fourth	„	„	„

(* From March to October inclusive).

The Medical Officer of Health has been appointed medical officer to the infant clinics in the district.

At these clinics the babies are weighed, records of the weight with the date being kept both in the clinic records and also entered on a card kept by the mother herself, so that the amount of increase or decrease can be readily noted. When the weighing is finished a short address is given to the mothers about the care

of their own and their babies' health and other subjects pertaining to their general well being. About twice a year competitions are held when the mothers write descriptions of their ideas of the best methods of dealing with problems of infant feeding, home management, etc., and do specimens of various kinds of needle-work. Much interest and enthusiasm are shown by the mothers in these competitions.

Child welfare work has become exceedingly popular in Chelmsford Rural District. Several requests for new clinics to be started in various parts of the area were under the consideration of the Council at the end of the year.

The average attendance at the clinics during the year was as follows :—

Broomfield	...	14	Great Baddow	...	24
Fryerning	...	9	Great Leighs	...	8
Galleywood	...	13	Great Waltham	...	20
Ingatstone	...	12	Writtle	...	23

Dried milk, etc., is available at the office at special clinic prices. This is sold only to those showing a card given them by the Health Visitor. In this way, it is ensured that only those unable to afford the ordinary retail price buy the food from the office.

Free milk is occasionally granted to mothers and infants in accordance with a scale approved by the Ministry of Health.

Under the Maternity and Child Welfare Scheme, a contract has been made with Chelmsford General Hospital, for the admission of cases as follows :—

Infants under five years of age requiring in-patient treatment.

Expectant mothers for Caesarian Section, etc.

Mothers suffering from serious complications arising after parturition.

Mothers and children under five years of age to the Dispensary for advice and treatment.

For the above facilities, the District Council pays to Chelmsford General Hospital an annual grant of £10 10s. and 15s. per week for adults, 10s. for children during the period the patient is in hospital.

During 1925, the hospital rendered the following services :—

Treatment for Appendicitis ...	... 1 child.
Operation for Hernia ...	... 2 children.
Treatment for broken arm .	. 1 child.
Tonsils removed ...	... 3 children.
Abdominal operation ...	... 1 child.
Treatment for sore on face ...	... 1 „
„ Rickets ...	... 1 „
„ Malformation at birth ...	... 1 „
Circumcision .	... 1 „
Teeth extraction ...	... 2 children.
„ „ ...	... 4 mothers.
Treatment for Abdominal trouble	... 1 mother.
Confinement complication ...	... 1 „

Of the above, 3 were in-patients and 12 were out-patients.

During the year, the Health Visitor paid the following visits :—

	First Visits.	Total Visits.
To expectant mothers...	4	6
To infants under 1 year .	441	892
To children 1—5 years ...	...	1172

This makes a total of 2070 visits paid during the year.

452 births were registered during the year and 387 were notified under the Notification of Births Act.

Of the 387 births notified :—

104 were notified by doctors.

261 were notified by midwives.

15 were notified by a trained maternity nurse where a doctor was in attendance.

7 were notified by parents. (Of these, 6 were attended by doctors, the remaining one being a case where a handy woman attended in emergency).

Of the 387 births notified, 380 were live births, and 7—4 notified by doctors and 3 by midwives—were stillbirths.

No case of Ophthalmia Neonatorum was notified during the year, and very few cases have occurred during the last five years. During that period, every case notified recovered without any injury to the sight.

No case of Puerperal Fever has been notified during the year.

Systematic visiting of expectant mothers is obviously impossible, but in cases where special information is received, the mother is visited and advice given and everything possible done to help her to make satisfactory arrangements for the confinement.

During 1925 a privately owned maternity home was opened in the Borough of Chelmsford which admits expectant mothers.

The number of deaths of infants under one year of age was very low, namely, 17. Of these, 12 died from congenital causes. There were no deaths from Measles, Whooping Cough or Diarrhoea.

No scheme is in operation for the treatment of Orthopaedic cases beyond the arrangements made with Chelmsford General Hospital. These cases are often arranged for by their private doctors, and as London is within a convenient distance of the district, usually have the advantage of treatment in a London hospital.

Early in 1926 the District Council, with the sanction of the Ministry of Health, appointed Miss R. W. Pascoe, fully qualified Nurse and certified Midwife, as part-time (equivalent to one day per week) Assistant Health Visitor, mainly to undertake visiting in Buttsbury, Stock, West and South Hanningfield parishes. Sanction was also granted to open weighing Centres (for one year to begin with) in Stock, Runwell, East Hanningfield and Danbury. Runwell Centre has since been opened by a local voluntary committee. Stock and East Hanningfield Centres have been opened by the District Council. Danbury had not been opened by middle of 1926.

FACTORIES, WORKSHOPS and WORKPLACES.

1. Inspection of Factories, Workshops and Workplaces.

INCLUDING INSPECTIONS made by SANITARY INSPECTORS.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
Factories	—	—	—
(Including Factory Laundries)			
Workshops	37	2	—
(Including Workshop Laundries)			
Workplaces	20	—	—
(Other than Outworkers' Premises)			
Total	57	2	—

2. - Defects found in Factories, Workshops and Workplaces.

Particulars.	Number of Defects.			Number of Prosecutions
	Found.	Remedied.	Referred to H.M. Inspector.	
(1)	(2)	(3)	(4)	(5)
<i>Nuisances under the Public Health Acts.—†</i>				
Want of cleanliness	1	1	—	—
Want of ventilation	—	—	—	—
Overcrowding	—	—	—	—
Want of drainage of floors	1	1	—	—
Other nuisances	1	1	—	—
{ insufficient... ..	—	—	—	—
Sanitary accommodation { unsuitable or defective	1	1	—	—
{ not separate for sexes	—	—	—	—
<i>Offences under the Factory and Workshops Act:—</i>				
Illegal occupation of underground bakehouse (s. 101)	—	—	—	—
Other offences	—	—	—	—
(Excluding offences relating to out-work and offences under the Sections mentioned in the Schedule in the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921).				
Total	4	4	—	—

†Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

REPORT OF CHIEF SANITARY INSPECTOR AND PETROLEUM INSPECTOR.

(A. DENTON OGDEN, M.R.S.I., M.S.I.A., F.R.S.A.)

Mr. Chairman and Gentlemen,

The work undertaken by your Sanitary Inspectors as such is incorporated in the Medical Officer of Health's Report; that undertaken by me as your Petroleum Inspector is set out below.

PETROLEUM ACTS AND LICENCES.

Under the provisions of the above Acts and Orders, 51 persons have been granted licences by the Council to store motor spirit (amounting in the aggregate to 13 902 gallons) compared with 43 in 1924 and 26 in 1923. Further applications are constantly being received and strict supervision is necessary.

Furthermore several supplementary licences have been issued during the year to dealers who have greatly increased their storage quantities.

In addition to the quantity of motor spirit kept in licensed stores a large quantity is stored by owners of light locomotives who are permitted to store up to 60 gallons without a licence, provided it is for their own use for the purpose of light locomotives.

Although a licence is not required to store any quantity up to 60 gallons for the purpose of light locomotives, the Regulations made by the Secretary of State and dated 31st July, 1907, must be strictly adhered to. These Regulations provide among other conditions that:—

“ Any person who keeps petroleum in a store which
“ is situate within 20 feet of any other building whether
“ or not in his occupation, or any timber stack or other
“ inflammable goods, shall give notice to the Local
“ Authority for the district that he is so keeping
“ petroleum and shall renew such notice in the month
“ of January in each year.”

Any person who sells any part of the petroleum kept by him, even though the greater portion of the spirit so kept is for use in his own motor vehicles must obtain a licence. The quantity of petroleum to be kept in any one store without a licence, whether or not upon light locomotives shall not exceed 60 gallons. Any person who contravenes these Regulations may on summary conviction be liable to a fine not exceeding £10.

A very important matter in the storage of inflammable spirit is the proximity or otherwise of drain or sewer openings. So far as I am aware I do not think it possible for spirit to escape from any licensed store in your district into any drain or sewer.

In one instance I found that the ownership of certain premises had been changed without notification being given. This was a contravention of the Regulations, and in the event of an accident might have given rise to some difficulty.

Certain cases occurred where underground pumps were fixed without permission, and fortunately for the owners all these happened to be in accordance with the conditions required. In two of these cases a licence had previously been granted for the storage of motor spirit in tins only so that there were contraventions in each case, by storing a greater quantity than stated on the licence.

In the third case, no previous licence had been granted and the offender was warned of the offence.

The present licence fee for storing motor spirit is 5s. per annum, all licences expiring on the 23rd August.

The revenue is retained by the District Council.

The following table shows the number and distribution of Petroleum Licences during the year 1925 :—

Parish.	Name of Licencee.	Maximum Licensed Storage.		
		(a) In under- ground tanks.	(b) In two gallon tins.	(c) Total.
Great Baddow	Baddow Brewery Co., Ltd.	500	—	500
"	Brazier, A. D....	—	30	30
"	Jackson, W. A.	300	50	350
"	Marven, D.	300	—	300
"	Lawrence, E. A.	—	24	24
"	Smith, G. W. ...	1000	40	1040
Boreham	Fuller, W.	500	—	500
"	Mouser, A. G. & Sons	500	20	520
"	Seabrook, W. & Sons	300	—	300
"	Ward, A. E. ...	—	8	8
Broomfield	Boosey, W.	—	30	30
"	Day, A.	300	—	300
"	Sluce, W.	—	50	50
Buttsbury	Graham, G.	—	30	30
Danbury	Digby, A. & H.	800	—	800
"	Nicholls, G. W.	—	24	24
"	Oakley, J.	—	30	30
"	Royce, R. R. ...	300	12	312
"	Ward, W.	—	60	60
Great Leighs	Pawsey, P. G. ...	300	—	300
Great Waltham	Brown, A. W. ...	300	90	390
"	Cass, W.	900	—	900
"	Pudney & Porter	500	20	520
Little Waltham	Stewart, F. H.	—	30	30
"	Poulton, W. W.	500	—	500
Little Baddow	Clark, Mrs. J. ...	—	20	20
"	Seagars, J. A. ...	—	28	28
Ingatestone	Brock, A.	—	100	100
"	Green, P.	500	—	500
"	Hasler & Co., Ltd.	500	—	500
"	Jackson, S. J. ...	400	800	1200
"	Wells, M.	—	20	20
Margaretting	Larcombe, A. W. B.	1000	—	1000
"	Southgate, R. W.	—	30	30
Pleshey ...	Luckin, C. H. ...	—	60	60
Rettendon	Cooper, W.	—	30	30
Stock ...	Boyd, H. B. ...	—	40	40
"	Longmuir, Mrs. D. I.	—	30	30
Widford	Mizen, J. R. ...	—	200	200
"	Smith & Hendrie	—	60	60
Woodham Ferrers	Davison, G. M.	—	36	36
"	Doe, P.	—	20	20
Writtle ...	Bucknell Bros.	1000	200	1200
"	Gates, A. E. ...	300	—	300
"	Foreman, L. P. & Son	400	—	400
"	Preston, H.	—	30	30
"	Woodyard, H. G.	250	—	250
		11650	2252	13902

CARBIDE OF CALCIUM.

The quantity of Carbide of Calcium which may be kept without a licence is as follows:—

1. Where carbide is kept in separate hermetically closed metal vessels, not more than 5-lbs. in 1-lb. tins.
2. Where the following conditions are observed, 28-lbs. may be kept without a licence:--
 - (a) It shall, at all times, be kept in hermetically closed metal vessels, except when the carbide is actually being placed in, or withdrawn from, such vessel.
 - (b) The vessel shall be kept in a dry and well ventilated place.
 - (c) No unauthorised person shall have access to the carbide.
 - (d) Notice shall be given to the Local Authority and free access shall be afforded to their duly authorised Inspector to inspect the portion of the premises where the carbide is kept and the generator is situated.

Where the above conditions cannot be complied with, or where it is desired to store a greater quantity, application must be made to the Local Authority for a licence.

The following table shows the number and distribution of Carbide of Calcium licences during the year:—

Parish.		Licensee.
Great Baddow	...	P. E. Inchbald
Buttsbury	..	D. Hume
„	...	E. C. Soper
Danbury	...	Chelmsford Star Co-operative Society
Stock	... ..	A. W. Upson

I have no comment to make on any of the above.

I have the honour to remain,

Your obedient Servant,

A. DENTON OGDEN.

REPORT ON COWS AND COWSHEDS IN THE CHELMSFORD RURAL DISTRICT.

(By J. Bishop Young, F.R.C.V.S., M.R. San. I.)

VETERINARY INFIRMARY,

BRAINTREE.

25th March, 1926.

*To the Chairman and Members of the Chelmsford Rural District
Council.*

Sir and Gentlemen,

I have the honour to present for your consideration my statistical and general reports on the health of the cows and the condition of the cowsheds and dairies in your district. Trusting they will again meet with your approval, I fully appreciate your confidence in selecting me to carry out the veterinary inspection for the second time.

My visits were quite unexpected, giving me an opportunity of seeing the herds and buildings under normal conditions. I was gratified to find that the cowkeepers, and their men too, welcomed my visits, and everywhere I was treated with the greatest consideration, in fact only one man at all resented my presence and, incidentally, his cows were dirty.

I found great improvement in the health and condition of the cows, and with a few exceptions they were clean; the same remark applies to the sheds and dairies. By referring to my statistical report, it will be noted that defective teats and udders are greatly reduced. I took samples of milk from thirty-one cows to be microscopically examined; in two of them Tubercle Bacilli were detected, the two cows have been reported and dealt with under the new Tuberculosis Order, also seven others in whose milk Streptococci were found in masses. The great reduction in clinical cases of Tuberculosis amongst the cows in your district is doubtless due to this beneficent order, cleaning out wasters and doubtful animals. All practical cowkeepers

know that a sound cow requires no more food than a faulty one, they either send such suspicious ones to the knacker direct or report them to the authorities who carry out this order and decide a fair compensation for them.

Throughout the district I was impressed with the greater desire for cleanliness. Never was there a worse winter for cowkeepers who desire to produce clean milk, the incessant rains made the mud appalling. Notwithstanding the adverse conditions in the majority of the sheds I found the cows decently clean and groomed, but I regret to have to inform you that I found some still "clagged" and the sheds dirty (in passing may I suggest that it is impossible to clean a "clagged" cow in February, cleaning and grooming should commence when they first enter the sheds for the winter, they are then clean and will remain in this condition until turning out time comes round again if they are always curry-combed night and morning, this requires very little time or exertion). If these men themselves, both master men and employees, would but realise the pleasure of working under clean and comfortable conditions and compare it with the purgatory of slaving in dirt, my task would be easy.

Several cases appealed to me where hard working men, with the best of intentions, are still trying to produce milk under most unsuitable conditions, of site and surroundings, these have been notified in my statistical report, and are already being dealt with by your Sanitary Inspector.

It may not be known to all of you that many of the cow keepers in your district were not brought up to the work. There are men of all types with varied previous experiences, such as the city man and the doctor, the draper and the music-hall comedian, with a fair sprinkling of ex-military men and colonials. Some, by their methods, could give a lead to the old stagers while others, undoubtedly, would have done better if they had stuck to their original professions.

Feeding is not exactly in my province, but as the roots and chaff or no roots and no chaff controversy is causing so much interest, I must say that it is a great deal easier to keep cows clean when no roots or chaff are fed, though this would be a problem on some of the dairy farms in your district where water is short and a certain amount of succulent food is always essential in lieu of water.

I was pleased to note that many farmers are putting water supplies into their sheds with good results, but still this seems to be practically an impossibility in some places. Why will people try to produce milk where water is short? It is always most unsatisfactory besides making much extra work.

It is difficult to foretell the future of cowkeeping, but already there seem to be signs of increased supply and limited demand. More men are entering the trade as corn growing has proved to be unprofitable, and the average yield, thanks to recording, better breeding and scientific feeding is increasing. The buyers prefer collecting big lots to small consignments, with the result that, in some cases, the small producer does not know where to market his milk. As in other industries, mass production is beginning to tell, and I fear the question of the small producer may get harder yet.

After the perusal of my figures on pages 126 and 127, I am sure you will agree with me that the inspections have not been in vain, and the marked improvement in the conditions under which the milk of your district is produced is undoubtedly a great credit, not only to the cow-keepers themselves but also to their employees who, for seven days a week attend to their charges as if they were their own, and are not above taking advice and trying new methods in order that they may give the public a purer food.

Yours obediently,

J. BISHOP YOUNG.

(Copy of Form used by Veterinary Inspector.)

Rural District Council of Chelmsford.

Veterinary Inspection of Dairy Herds.

Name of Occupier of Farm

Situation of Farm

Parish

Address of Occupier (if other than at farm)

Total number of cows

" " inspected

" " in milk

" " dry

Average quantity of milk produced daily

To whom sold

Number of cows with abnormal conditions of the udder as follows :—

Tubercle of Udder

Atrophy

Mammitis

Induration (not Tubercular)..... .. .

Eruption of Teats

Induration of Teats

(a) Number of samples of milk taken for bacteriological examination

Result of such examination

(b) Number of cows suffering from advanced Tuberculosis

(c) Number of cows (if any), the milk of which in my opinion should not be sold for human consumption

(Note. Record below full particulars to enable the cows included in (a), (b) and (c) to be identified).

General Report as to :—

(1) Dairy

(2) Cowshed

(3) Health of cows

(4) Suitability of accommodation

(5) Cleanliness

(6) Methods

Parish.	Number of :—				Number of Cows with abnormal condition of Udder					
	Herds	Cows in Milk	Samples of Milk		Teat cracked	Induration	Udder Induration	Mammitis	Tuberculosis	Totals
			Taken	Showing Acid Fast Bacilli						
Great Baddow	15	290	3	—	2	—	—	2	—	38
Little Baddow	3	72	—	—	1	—	—	—	—	6
Boreham	8	196	3	—	2	—	—	—	—	24
Broomfield	5	168	—	—	1	—	—	—	—	13
Buttsbury	4	127	1	—	2	1	—	—	1	19
Chignall	2	53	1	—	—	—	—	—	—	7
Danbury	6	69	1	—	—	—	—	—	—	8
East Hammingfield	14	258	3	1	2	—	3	4	—	35
West Hammingfield	10	150	1	—	2	—	1	—	—	20
South Hammingfield	2	52	—	—	—	—	—	—	—	6
Ingatstone	15	273	3	—	1	—	1	2	—	30
Great and Little Leighs	2	49	1	—	—	—	1	1	—	7
Margaretting	6	105	—	—	—	—	—	—	—	13
Roxwell	5	111	3	—	1	—	1	—	—	8
Retendon and Runwell	15	232	1	—	—	—	—	1	—	11
Sandon	7	130	2	—	2	—	—	—	—	13
Stock	8	200	—	—	—	—	1	—	—	19
Springfield	3	62	—	—	—	—	—	—	—	4
Great and Little Waltham	3	43	—	—	—	—	1	—	—	4
Widford	2	88	1	—	—	—	—	—	—	3
Woodham Ferris	20	316	4	—	—	—	—	—	—	35
Writtle	14	348	3	1	—	—	2	—	—	26
	168	3392	31	2	16	10	13	11	—	348
Percentages of Milch Cows affected 1925-26										
	...	...	...	...	—	29	38	32	—	9.8
Percentages of Milch Cows affected, 1924-25										
	...	...	...	...	—	65	47	1.03	—	12.66

VETERINARY INSPECTION OF DAIRY HERDS, 1925-26.

TABLE SHOWING NUMBER, DISTRIBUTION AND
AVERAGE DAILY YIELD.

Parish.	Dairy Herds.	Cows.		Gallons Daily.
		Total.	In Milk.	
Baddow, Great ...	15	333	290	642
Baddow, Little ...	3	90	72	147
Boreham ...	8	229	196	413
Broomfield ...	5	188	168	299
Buttsbury ...	4	147	127	290
Chignall ...	2	63	53	112
Danbury ...	5	84	60	94
Hanningfield, East ...	14	301	258	508
Hanningfield, West ...	10	183	150	299
Hanningfield, South ...	2	65	52	115
Ingatestone ...	15	327	273	545
Leighs, Great and Little ...	2	55	49	126
Margaretting ...	6	128	105	241
Roxwell ...	5	130	111	275
Rettendon and Runwell ...	15	281	232	423
Sandon ...	7	158	130	304
Stock ...	8	234	200	455
Springfield ...	3	69	62	152
Waltham, Great and Little	3	45	43	65
Widford ...	2	106	88	182
Woodham Ferris ...	20	373	316	556
Writtle ...	14	405	348	715
	168	3994	3392	6958

3392 Cows in Milk yield 6958 gallons,
or 2.05 gallons per cow,
as against 1.98 gallons per cow in 1924-25.

TABLE SHOWING NUMBER OF HOUSES AND POPULATION IN
JUNE, 1921, AND DECEMBER, 1925.

Parish.	Area in statute acres (land and inland water).	Number of houses.			Population.	
		Census, 1921.	Erected since Census.	Estimated at end of 1925.	Census, 1921.	Estimated at end of 1925.
Boreham	3801	223	10	233	1023	1064
Broomfield	2332	344	8	352	1396	1414
Buttsbury	2113	205	134	339	863	1378
Chignall	2027	92	4	96	367	384
Danbury	3495	273	98	371	1181	1556
East Hanningfield	2682	109	7	116	474	498
Good Easter...	1988	95	6	101	417	444
Great Baddow	3911	705	120	825	3879	3324
Great Leighs	3146	171	2	173	676	677
Great Waltham	7451	532	11	543	2029	2063
Ingatestone & Fryerning	4133	484	44	528	2012	2203
Little Baddow	2756	153	13	166	671	720
Little Leighs	1079	35	...	35	136	140
Little Waltham	2310	176	7	183	668	695
Margaretting	2284	146	4	150	593	620
Mashbury	898	38	...	38	128	129
Pleshey	732	72	...	72	278	276
Rettendon	3708	194	13	207	851	898
Roxwell	4782	179	4	183	749	769
Runwell	2070	98	26	124	382	483
Sandon	2408	132	8	140	635	664
South Hanningfield	3488	58	5	63	238	252
Springfield	2268	106	4	110	445	462
Stock	2724	163	11	174	669	713
West Hanningfield	2839	123	13	136	526	584
Widford	680	86	1	87	370	374
Woodham Ferris	4482	284	87	371	1168	1500
Writtle	8458	657	42	699	2792	2951
Totals	83045	5933	682	6615	24616	27215

RURAL DISTRICT COUNCIL OF CHELMSFORD.

STATEMENT OF THE ASSETS OF THE COUNCIL AT 31ST MARCH,
1925, EXCLUDING POST-WAR HOUSING SCHEMES AS RECORDED
IN THE AUDITED ACCOUNTS.

Description of Property.	Situation.		Value.		
			£	s.	d.
Water tower, engine house, machinery, mains, and all property in connection with the public water supply	Great Baddow	...	11,168	19	3
Ditto ...	Broomfield	...	5,562	13	6
Ditto ...	Danbury and six other parishes	...	15,269	6	5
Ditto ...	Ingatestone	...	11,040	15	6
Ditto ...	Writtle	...	6,681	18	9
Sewage land	Broomfield	...	1,515	9	0
Ditto ...	Ingatestone	...	1,225	12	0
Sewage land and works	Writtle	...	1,438	6	6
Council Offices	Waterloo Lane, Chelmsford	...	2,143	7	1
16 cottages	Little Baddow, Danbury and Sandon	...	2,981	4	7
Total			£59,027	12	7

N.B.—The value indicated above is the cost price of the works as originally carried out with extensions added and superseded works deducted, and represents the actual cost of the assets as existing on the 31st March, 1925.

The cost of the Assisted Housing Scheme (*i.e.*, the Addison Scheme), under which 154 houses were erected is given on page 85.

Assessable Value of Rural District classified according to Parish and Year.

Parish.	1891†	1901	1911	1921	1922	1923	1924	1925	1926
	£	£	£	£	£	£	£	£	£
Adow, Great ...	8982	8635	10947	12794	12488	13462	13101	13623	14054
Adow, Little ...	3261	2300	2565	3199	3131	3201	2858	2927	3023
Adham ...	10454	8301	9862	10668	10522	10481	7930	8434	8215
Adomfield ...	5039	4110	5247	7869	7614	7679	7240	7244	7237
Adtsbury ...	2625	2236	2682	3521	3583	3800	3715	4755	5155
Adgnall ...	2415	1670	1707	2012	1944	1961	1557	1533	1536
Adbury ...	4250	3504	3992	5068	4911	5222	5003	5285	5433
Ad Easter ...	2047	1512	1522	1815	1722	1722	1421	1421	1421
Adningfield, East ...	2264	1724	1866	2248	2107	2107	1807	1832	1832
Ad, South ...	1124	971	1138	1305	1235	1249	1077	1102	1107
Ad, West ...	2789	1955	1982	2281	2224	2238	1885	1923	1992
Adstone & Fryerning ...	12725	12368	15239	16553	16431	16768	14843	15316	14976
Adths, Great... ..	3430	2417	2478	2929	2642	2633	2277	2293	2308
Ad, Little ...	978	698	753	1005	847	847	713	713	700
Adgaretting... ..	8780	8491	10550	10836	10695	10765	8042	8800	8203
Adhbury ...	879	614	645	751	697	697	546	546	541
Adshey ...	1004	734	851	968	911	904	798	797	797
Adtendon ...	3982	2892	3457	3873	3682	3699	3139	3187	3195
Adwell ...	5245	3551	3797	4154	3739	3637	2924	2959	2836
Adwell ...	1873	1236	1626	2032	1974	2037	1833	1933	1875
Adon ...	2809	2132	2536	2866	2760	2770	2451	2477	2522
Adingfield ...	14331	15194	4930	5453	5322	5317	4110	4426	4242
Adck ...	3337	2660	2895	3381	3303	3306	2826	2880	2917
Adltham, Great ...	9508	6904	7056	8084	7621	7621	6379	6367	6352
Ad, Little ...	3351	2610	2676	3125	2945	2968	2611	2631	2633
Addford ...	3390	3858	4915	5054	4995	4921	3745	4075	3814
Adodham Ferris ...	4674	4002	4351	4752	4684	4891	4314	4463	4553
Adittle ...	12891	11781	11334	12709	12407	12523	10978	10851	10994
Adals Rural District ...	139036	119110	123599	141305	137136	139426	120121	124793	124516
Adelmstord Borough ...	44886	58359	94268	128453	132341	135196	137705	141139	145587
Grand totals ...	183922	177469	217967	269758	269477	274623	257826	265932	270102

†Prior to Agricultural Rates Act, 1896, and therefore land is at full value.

Produce of 1d. in £ on Assessable Value.

Parish	1891	1901	1911	1921	1922	1923	1924	1925	1926
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Baddow, Great	27 8 6	35 19 7	45 12 3	53 6 2	52 0 8	56 1 10	54 11 9	56 15 3	58 11 2
" Little	13 11 9	9 11 8	10 13 3	13 6 7	13 0 11	13 6 9	11 18 2	12 3 11	12 11 11
Boreham	43 11 2	34 11 9	41 1 10	44 9 0	43 16 10	43 13 5	33 0 10	35 2 10	34 4 7
Broomfield	20 19 11	17 2 6	21 17 3	32 15 9	31 14 6	31 19 11	30 3 4	30 3 8	30 3 1
Buttsbury	10 18 9	9 6 4	11 3 6	14 12 5	14 18 7	15 16 8	15 9 7	19 16 3	21 9 7
Chignall	10 1 3	6 19 2	7 2 3	8 7 8	8 2 0	8 3 5	6 9 9	6 7 9	6 8 0
Danbury	17 14 2	14 12 0	16 12 8	21 2 4	20 9 3	21 15 2	20 16 11	22 0 5	22 12 9
Good Easter	8 10 7	6 6 0	6 6 10	7 11 3	7 3 6	7 3 6	5 18 5	5 18 5	5 18 5
Hanningfield, East	9 8 3	7 3 8	7 15 6	9 7 4	8 15 7	8 15 7	7 10 7	7 12 8	7 12 8
" South	4 13 8	4 0 11	4 14 10	5 8 9	5 2 11	5 4 1	4 9 9	4 11 10	4 12 3
" West	11 12 5	8 2 11	8 5 2	9 10 1	9 5 4	9 6 6	7 17 1	8 0 3	8 0 6
Ingatstone and Fyvinge	53 0 5	51 10 8	63 9 11	68 19 5	68 9 3	69 17 4	61 16 11	63 16 4	62 8 0
Leighs, Great	14 5 10	10 1 5	10 6 6	12 4 1	11 0 2	10 19 5	9 9 9	9 11 1	9 12 4
" Little	1 1 6	2 15 2	3 2 9	4 3 9	3 10 7	3 10 7	2 19 5	2 19 5	2 18 4
Margaretting	36 11 8	35 7 7	43 19 2	45 3 0	44 11 3	44 17 1	33 10 2	36 13 4	34 3 7
Mashbury	3 13 3	2 11 2	2 13 9	3 2 7	2 18 1	2 18 1	2 5 6	2 5 6	2 5 5
Pleshey	4 3 8	3 1 2	3 10 11	4 0 8	3 15 11	3 15 4	3 6 6	3 6 5	3 6 3
Retendon	16 11 10	12 1 0	14 8 1	16 2 9	15 6 10	15 8 3	13 1 7	13 5 7	13 6 3
Roxwell	21 17 1	14 15 11	15 16 5	17 6 2	15 11 7	15 3 1	12 3 8	12 6 7	12 0 6
Runwell	7 16 1	5 7 2	6 15 6	8 9 4	8 4 6	8 9 9	7 12 9	8 1 1	7 16 3
Sandon	11 14 1	8 17 8	10 11 4	11 18 10	11 10 0	11 10 10	10 4 3	10 6 5	10 10 2
Springfield	59 14 3	63 6 2	20 10 10	22 14 5	22 3 6	22 3 1	17 2 6	18 8 10	17 13 6
Stock	13 18 1	11 1 8	12 1 3	14 1 9	13 15 3	13 15 6	11 15 6	12 0 0	12 3 1
Waltham, Great	39 12 4	28 15 4	29 8 0	33 13 8	31 15 1	31 15 1	26 11 5	26 10 7	26 9 4
" Little	13 19 3	10 17 6	11 3 0	13 0 5	12 5 5	12 7 4	10 17 7	10 19 3	10 19 7
Widford	16 12 6	16 1 6	18 2 7	21 1 2	20 16 3	20 10 1	15 12 1	16 19 7	15 17 10
Woodham Ferris	19 9 5	16 13 6	18 2 7	19 16 0	19 10 4	20 7 7	17 19 6	18 11 11	18 19 5
Writtle	53 14 3	49 1 9	47 4 6	52 19 1	51 13 11	52 3 7	45 14 10	45 4 3	45 16 2
Totals Rural District	579 6 4	496 5 10	514 19 11	538 15 5	571 8 0	530 18 10	500 10 1	519 19 5	518 16 3
Chelmsford Borough	187 0 6	243 3 3	393 4 0	535 4 5	551 8 5	563 6 5	573 10 1	588 1 7	606 12 3
Grand Totals	766 6 10	739 9 1	908 3 11	1123 19 10	1122 16 5	1144 5 3	1074 5 6	1108 1 0	1125 8 6

Amount of Precepts issued upon the Overseers in respect of Guardians
Expenses, year ending 31st March.

Parish.	1918	1919	1920	1921	1922	1923	1924	1925	1926
	£	£	£	£	£	£	£	£	£
Baddow, Great ...	2092	2408	2700	4692	5068	5104	3565	4296	4464
Baddow, Little ...	480	560	652	1112	1172	1160	717	860	896
Boreham ...	1768	2008	2276	3884	4124	3404	2011	2536	2532
Broomfield ...	1464	1592	1776	2648	2812	2684	1769	2084	2060
Buttsbury ...	604	692	780	1328	1448	1480	1042	1488	1624
Chignall ...	320	360	416	672	704	680	347	432	428
Danbury ..	844	976	1108	1884	1988	1980	1373	1680	1752
Good Easter ...	348	372	424	660	688	656	390	460	464
Manningfield, East ...	356	412	480	812	836	804	469	560	568
„ South ...	184	224	252	432	448	432	233	284	292
„ West ...	344	420	484	828	864	840	480	584	604
Engatestone and Fryerning ...	2780	3180	3568	6132	6608	5944	3970	4800	4788
Heighs, Great ...	460	548	652	1052	1044	1000	597	712	716
„ Little ...	152	184	208	348	336	308	172	212	204
Margaretting ...	1800	2060	2316	3976	4264	3376	2090	2696	2644
Mashbury... ..	124	140	160	268	268	264	135	164	164
Meshey ...	152	180	208	352	364	352	207	244	248
Mettendon ...	732	828	872	1356	1412	1328	794	952	968
Moxwell ...	620	712	828	1392	1420	1280	654	820	803
Munwell ..	364	404	452	720	752	748	477	588	580
Mandon ...	460	544	624	1080	1080	1048	639	760	776
Northampton ...	892	1032	1172	2000	2128	1804	1084	1356	1350
Northampton ...	536	612	692	1192	1268	1224	715	860	872
Northampton, Great ...	1240	1464	1680	2872	2968	2836	1640	1836	1948
„ Little ...	480	564	648	1112	1164	1116	686	816	816
Northampton ...	856	980	1096	1880	2020	1600	987	1260	1244
Northampton Ferris ...	832	956	1084	1812	1932	1864	1187	1428	1472
Northampton ...	2060	2328	2628	4392	4680	4536	2706	3188	3208
Totals for Rural District	23344	26740	30236	50888	53860	49852	31138	37956	38500
Northampton Borough ...	14632	17012	20268	36304	39652	36652	24370	30784	31964
Grand Totals ...	37976	43752	50504	87192	93512	86504	55508	68740	70464

Amount of Precepts issued upon Overseers in respect of Sanitary and Highway
expenses, year ending 31st March.

Parish.	1918	1919	1920	1921	1922	1923	1924	1925	1926
	£	£	£	£	£	£	£	£	£
Baddow, Great ...	836	820	1052	1996	2284	2164	3122	3864	3900
Baddow, Little ...	208	204	276	484	564	508	662	824	832
Boreham ...	728	692	916	1644	1884	1516	1802	2512	2384
Broomfield ...	500	488	676	1208	1368	1220	1685	2000	2016
Buttsbury ...	232	224	300	548	652	616	965	1400	1400
Chignall ...	136	132	176	304	352	312	357	424	432
Danbury ...	340	328	428	772	892	832	1180	1496	1496
Good Easter ...	124	116	160	272	312	276	323	392	392
Hanningfield, East ...	148	144	192	336	376	332	409	502	512
" South ...	88	84	116	196	224	196	246	308	304
" West ...	152	152	204	336	400	356	442	548	544
Ingatestone & Fryerning	1128	1068	1406	2584	2944	2548	3463	4172	4200
Leighs, Great ...	184	188	256	424	472	424	522	776	640
" Little ...	68	64	88	148	152	132	162	244	192
Margaretting ...	736	700	924	1684	1920	1516	1842	2336	2416
Mashbury ...	52	48	64	112	128	112	120	152	144
Pleshey ...	64	64	84	144	168	144	177	224	216
Rettendon ...	276	232	328	580	664	576	705	884	880
Roxwell ...	280	272	364	628	672	576	645	824	792
Runwell ...	132	128	176	300	356	320	439	536	512
Sandon ...	196	188	260	428	496	436	567	700	680
Springfield ...	372	348	472	836	952	780	945	1200	1224
Stock ...	228	212	284	516	592	524	641	796	800
Waltham, Great ...	532	508	696	1232	1368	1192	1423	1756	1760
" Little ...	196	196	268	472	528	468	599	728	732
Widford ...	344	328	428	788	896	696	853	1084	1112
Woodham Ferris ...	320	304	420	732	852	764	1017	1244	1272
Writtle ...	852	816	1084	1948	2244	1956	2524	3016	3040
Totals ...	9452	9048	12100	21652	24712	21492	27837	34942	34960

Amount of Precepts issued upon the Overseers in respect of Special
Expenses, year ending 31st March.

Parish.	1918	1919	1920	1921	1922	1923	1924	1925	1926
	£	£	£	£	£	£	£	£	£
Baddow, Great ...	100	100	360	1809	1000	480	358	918	618
„ Little ...	...	..	9	18	18	49	18	18	48
Boreham ...	...	...	...	...	...	...	...	...	9
Broomfield ...	240	240	460	540	540	400	400	480	400
Buttsbury ...	...	...	...	...	..	...	30	29	29
Chignall ...	...	...	5	...	5	...	5	...	9
Danbury ...	..	...	9	18	9	89	59	18	18
Good Easter ...	...	...	...	...	...	...	9	...	...
Hanningfield, East ...	...	...	9	18	18	45	18	18	18
„ South ...	...	...	...	9	...	...	9	...	9
„ West ...	...	...	...	..	9	...	...	...	9
Ingatestone and Fryerning ...	560	560	700	880	1100	1100	1360	1500	1200
Leighs, Great ...	...	...	...	..	5	...	18	...	9
„ Little ...	...	...	...	...	...	...	9	...	5
Margaretting ...	...	...	200	57	...	18	9	...	...
Mashbury... ..	...	...	...	...	...	...	...	...	...
Pleshey ...	...	...	...	...	9	...	...	...	18
Rettendon ...	60	68	120	260	200	280	200	200	160
Roxwell ...	...	5	...	9	...	9	9	...	...
Runwell ...	9	9	20	69	49	69	18	18	18
Sandon ...	...	...	9	18	18	40	40	18	18
Springfield ...	...	...	...	...	...	...	...	...	...
Stock ...	...	...	...	...	...	...	18	18	18
Waltham, Great ...	68	68	172	148	120	120	120	120	120
„ Little ...	33	33	89	29	40	80	40	40	40
Widford ..	72	72	128	140	120	80	80	80	80
Woodham Ferris ...	48	48	90	120	120	200	280	260	160
Writtle ...	1080	1080	1400	1800	1800	1809	1709	1600	1489
	2270	2283	3780	5942	5180	4868	4816	5435	4502

Amount of the Precepts issued upon the Overseers by the Guardians and
Rural District Council, year ending 31st March.

Parish.	1918	1919	1920	1921	1922	1923	1924	1925	1926
	£	£	£	£	£	£	£	£	£
Baddow Great ...	3028	3328	4112	8497	8352	7748	7045	9078	8988
„ Little ..	688	764	937	1614	1754	1717	1397	1702	1774
Borcham ..	2596	2700	3192	5528	6008	4920	3813	5048	4923
Broomfield ...	2204	2320	2912	4396	4720	4304	3851	4564	4477
Buttsbury ...	836	916	1080	1876	2100	2096	2037	2917	3061
Chignall ...	456	492	597	976	1061	992	709	856	870
Danbury ...	1184	1304	1545	2674	2898	2901	2614	3194	3266
Good Easter ...	472	488	584	932	1000	932	722	852	859
Hanningfield, East	504	556	681	1166	1230	1181	896	1080	1102
„ South	272	308	368	637	672	628	488	592	607
„ West	496	572	688	1164	1273	1196	922	1132	1158
Ingatestone & Fryerning	4468	4808	5676	9596	10652	9592	8793	10472	10255
Leighs, Great ...	544	736	908	1476	1521	1124	1137	1488	1373
„ Little ...	220	248	296	496	488	440	343	456	401
Margaretting ...	2536	2760	3440	5717	6184	4910	3911	5032	5054
Mashbury ...	176	188	224	280	496	376	255	316	312
Pleshey ...	216	244	292	396	532	496	384	468	484
Rettendon ...	1068	1128	1320	2196	2276	2184	1699	2036	2015
Roxwell	900	989	1192	2029	2092	1863	1308	1644	1603
Runwell ...	505	541	648	1089	1157	1137	934	1142	1113
Sandon ...	656	732	1893	1526	1591	1524	1246	1478	1483
Springfield ...	1264	1380	1644	2836	3080	2584	2029	2556	2581
Stock ...	764	824	976	1708	1860	1748	1374	1674	1697
Waltham Great...	1840	2040	2548	4252	4456	4148	3183	3712	3831
„ Little...	709	793	1005	1613	1732	1664	1325	1584	1586
Widford ...	1272	1380	1652	2808	3036	2376	1920	2424	2443
Woodford Ferris	1200	1308	1594	2664	2904	2828	2484	2932	2908
Writtle ...	3992	4224	5112	8140	8724	8301	6939	7804	7742
Totals									
Rural District	35066	38071	46116	78482	83752	76212	63791	78333	77966
Chelmsford Borough...	14632	17012	20268	36304	39652	36652	24370	30784	319164
Grand totals	49698	55083	66384	114786	123404	112864	88161	109117	397130

Rates levied in the £, year ending 31st March.

Parish.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
addow, Great ...	7 2	6 9	5 11	5 6	6 2	7 7	16 5	15 5	13 4	11 5	15 3
addow, Little ...	6 2	6 0	5 6	5 2	5 4	6 2	11 10	13 4	12 8	11 4	13 4
reham ...	6 0	5 7	5 2	4 11	5 3	6 0	11 0	12 0	12 0	9 8	13 4
oomfield ...	9 0	7 10	7 0	6 6	6 4	8 0	13 2	13 10	13 4	11 4	12 10
attsbury ...	6 8	6 4	6 0	5 6	5 8	6 8	11 4	12 4	11 10	10 10	11 10
ignall... ..	6 4	5 10	5 8	4 10	5 2	6 0	11 4	13 4	12 0	10 4	13 0
anbury ...	6 4	6 2	5 6	5 2	5 6	6 6	12 0	13 4	12 0	11 6	13 4
ood Easter...	7 8	6 10	6 8	6 2	6 0	7 4	12 4	13 4	11 10	11 8	14 8
anningfield, East...	6 6	6 2	5 8	4 10	5 8	6 4	12 6	14 0	13 0	11 10	13 6
„ South ...	6 0	6 0	5 6	4 6	5 0	6 0	12 0	13 0	12 0	10 0	10 0
„ West ...	6 4	6 2	5 6	4 8	5 4	6 4	12 8	14 0	12 6	10 0	12 0
gatestone & Fryerning	7 9	7 4	6 9	6 5	6 10	8 1	13 5	14 11	14 0	13 4	16 0
ighs, Great ...	6 10	6 6	6 0	5 2	5 6	6 8	12 6	14 0	12 4	11 8	14 8
„ Little ...	7 0	6 6	6 4	5 8	6 2	6 4	12 4	14 8	13 0	11 8	14 8
argaretting ...	5 10	5 8	5 2	4 10	5 4	6 2	11 2	11 10	11 10	10 0	12 2
ashbury ...	6 8	6 8	6 0	5 6	5 6	6 2	12 8	14 0	13 6	11 4	14 0
eshey ...	6 8	6 4	6 0	5 8	6 0	6 8	12 0	12 8	12 8	11 0	13 0
ttendon ...	7 10	7 5	7 1	6 5	6 10	7 10	13 10	15 2	14 4	13 4	15 0
xwell ...	6 0	5 10	5 8	4 8	5 4	6 8	12 0	12 4	11 6	10 0	12 0
nwell ...	6 11	7 0	6 4	5 8	5 8	7 5	14 0	14 6	13 8	12 0	13 8
ndon ...	6 4	6 2	5 6	4 10	5 6	6 4	12 10	14 0	13 2	11 0	13 0
ringfield ...	6 1	5 10	5 2	4 11	5 4	6 6	11 6	12 4	12 6	11 0	13 4
ock ...	6 2	6 2	5 4	5 2	5 4	6 4	11 0	12 4	11 6	10 8	12 8
altham, Great ...	6 8	6 4	5 8	5 8	5 6	7 6	12 10	13 4	12 6	11 10	13 8
„ Little ...	6 8	6 6	5 6	5 2	5 10	7 8	12 6	14 0	12 8	12 0	14 4
ddford ...	6 0	6 2	5 6	5 10	6 2	7 9	13 2	15 2	15 0	10 6	13 6
odham Ferris ..	7 2	7 6	6 3	5 6	6 0	7 4	13 0	14 0	13 9	13 6	13 8
ittle ...	9 1	9 8	9 0	8 8	9 0	10 2	16 4	17 8	16 10	15 0	16 8
helfmsford ...	4 4	4 2	3 2	3 6	4 2	5 0	8 0	8 4	8 0	5 10	5 5

These rates are exclusive of charges made for water supplied.

*Poor Rate only.

Cost of removal of scavenging incurred by District Council, year ending
31st March.

Parish.	1918	1919	1920	1921	1922	1923	1924	1925
	£	£	£	£	£	£	£	£
Baddow, Great ..	109	110	154	143	207	143	145	150
„ Little ...	...	..	...	...	...	...	...	..
Boreham ...	...	...	...	...	...	...	...	...
Broomfield ...	88	111	228	232	359	259	260	229
Buttsbury ...	...	...	...	...	...	9	21	29
Chignall ...	...	...	...	...	...	...	..	...
Danbury ...	...	...	..	...	...	...	...	...
Good Easter ...	...	...	...	...	...	...	...	...
Hanningfield, East...	...	...	...	..	...	...	...	...
„ South ...	...	...	..	...	...	...	...	...
„ West ...	...	...	...	...	...	...	...	...
Ingatestone & Fryer- ning... ..	95	96	131	110	154	113	104	116
Leighs, Great ...	...	...	...	...	...	..	...	...
„ Little ...	...	...	...	...	...	..	...	...
Margaretting ...	...	...	...	...	...	...	...	...
Mashbury ...	...	...	...	...	...	...	...	...
Pleshey ...	...	...	...	...	...	...	...	...
Rettendon ...	13	18	22	24	38	19	30	29
Roxwell ...	...	...	..	...	..	...	...	...
Runwell ...	...	...	...	...	...	..	...	...
Sandon ...	...	...	...	...	...	...	...	...
Springfield ...	...	...	..	...	...	...	..	...
Stock ...	...	...	...	...	...	...	...	...
Waltham, Great ...	31	31	46	62	85	60	61	67
„ Little ...	21	20	32	48	49	32	32	35
Widford ' ...	26	26	33	30	33	20	21	23
Woodham Ferris ...	...	...	...	...	...	...	...	...
Writtle ...	...	...	35	19	143	117	120	127
	383	412	681	668	1068	772	794	875

